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A N D

ANIMATED NATURE:

By OLIVER GOLDSMITH.

V O L. III.

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C H A P. I.

Of Ruminating Animals.

OF all animals, those that chew the cud are the most harmless, and the most easily tamed. As they live entirely upon vegetables, it is neither their interest nor their pleasure to make war upon the rest of the brute creation; content with the pastures where they are placed, they seldom desire to change, while they are furnished with a proper supply; and fearing nothing from each other, they generally go in herds for their mutual security. All the fiercest of the carnivorous kinds seek their food

in gloomy solitude ; these, on the contrary, range together ; the very meanest of them are found to unite in each other's defence ; and the hare itself is a gregarious animal, in those countries where it has no other enemies but the beasts of the forest to guard against.

As the food of ruminant animals is entirely of the vegetable kind, and this is very easily procured, so these animals seem naturally more indolent and less artful than those of the carnivorous kinds ; and as their appetites are more simple, their instincts seem to be less capable of variation. The fox or the wolf are for ever prowling ; their long habits of want give them a degree of sharpness and cunning ; their life is a continued scene of stratagem and escape : but the patient ox, or the deer, enjoy the repast that Nature has abundantly provided ; certain of subsistence, and content with security.

As Nature has furnished these animals with an appetite for such coarse and simple nutriment, so she has enlarged the capacity of the intestines, to take in a greater supply. In the carnivorous kinds, as their food is nourishing and juicy, their stomachs are but small, and their intestines short ; but in these, whose pasture is coarse, and where much must be accumulated before any quantity of nourishment
can

can be obtained, their stomachs are large and numerous, and their intestines long and muscular. The bowels of a ruminating animal may be considered as an elaboratory, with vessels in it, fitted for various transmutations. It requires a long and tedious process before grass can be transmuted into flesh; and for this purpose, Nature, in general, has furnished such animals as feed upon grass, with four stomachs, through which the food successively passes, and undergoes the proper separations.

Of the four stomachs with which ruminant animals are furnished, the first is called the paunch, which receives the food after it has been slightly chewed; the second is called the honeycomb, and is properly nothing more than a continuation of the former; these two, which are very capacious, the animal fills as fast as it can, and then lies down to ruminate, which may be properly considered as a kind of vomiting without effort or pain. The two stomachs above-mentioned being filled with as much as they can contain, and the grass which was slightly chewed, beginning to swell with the heat of situation, it dilates the stomachs, and these again contract upon their contents. The aliment, thus squeezed, has but two passages to escape at; one into the third stomach,

which is very narrow ; and the other back, by the gullet, into the mouth, which is wider. The greatest quantity, therefore, is driven back through the largest aperture into the mouth, to be chewed a second time ; while a small part, and that only the most liquid, is driven into the third stomach, through the orifice which is so small. The food which is driven to the mouth, and chewed a second time, is thus rendered more soft and moist, and becomes at last liquid enough to pass into the conduit that goes to the third stomach, where it undergoes a still farther comminution. In this stomach, which is called the manyfold, from the number of its leaves, all which tend to promote digestion, the grass has the appearance of boiled spinage, but not yet sufficiently reduced, so as to make a part of the animal's nourishment : it requires the operation of the fourth stomach for this purpose, where it undergoes a complete maceration, and is separated to be turned into chyle.

But Nature has not been less careful in another respect, in fitting the intestines of these animals for their food. In the carnivorous kinds they are thin and lean ; but in ruminating animals they are strong, fleshy, and well covered with fat. Every precaution seems taken that can help their digestion :

digestion : their stomach is strong and muscular, the more readily to act upon its contents ; their intestines are lined with fat, the better to preserve their warmth ; and they are extended to a much greater length, so as to extract every part of that nourishment which their vegetable food so scantily supplies.

In this manner are all quadrupedes of the cow, the sheep, or the deer kind, seen to ruminate ; being thus furnished with four stomachs, for the macerating of their food. These, therefore, may most properly be called the ruminant kinds ; although there are many others that have this quality in a less observable degree. The rhinoceros, the camel, the horse, the rabbit, the marmotte, and the squirrel, all chew the cud by intervals, although they are not furnished with stomachs like the former. But not these alone, there are numberless other animals that appear to ruminate ; not only birds, but fishes, and insects. Among birds are the pelican, the stork, the heron, the pigeon, and the turtle ; these have a power of disgorging their food to feed their young. Among fishes are lobsters, crabs, and that fish called the dorado. The salmon also is said to be of this number : and, if we may believe Ovid, the scarus likewise ;

likewise; of which he says* :

Of all the fish that graze beneath the flood,
He only ruminates his former food.

Of insects, the ruminating tribe is still larger; the mole, the cricket, the wasp, the drone, the bee, the grasshopper, and the beetle. All these animals either actually chew the cud, or seem at least to ruminate. They have the stomach composed of muscular fibres, by means whereof the food is ground up and down, in the same manner as in those which are particularly distinguished by the appellation of ruminants.

But not these alone; men themselves have been often known to ruminate, and some even with pleasure. The accounts of these calamities, for such I must consider them, incident to our fellow-creatures, are not very pleasant to read; yet I must transcribe a short one, as given us by Stare, in the Philosophical Transactions, as it may in some measure shew the satisfaction which the lower tribes of animals enjoy while they ruminate. The man in question was a citizen of Bristol, of about twenty years of age, and, what seemed more extraordinary still, of a ruminating family, for his father was

* At contra herbosa pisces laxantur arena,
Ut scarus epastas solus qui ruminat escas.

frequently subject to the same infirmity, or amusement, as he himself perhaps would call it. This young man usually began to chew his meat over again within about a quarter of an hour after eating. His ruminating after a full meal generally lasted about an hour and a half; nor could he sleep until this task was performed. The victuals, upon the return, tasted even more pleasantly than at first; and returned as if they had been beaten up in a mortar. If he eat a variety of things, that which he eat first came up again first; and if this return was interrupted for any time, it produced sickness and disorder, and he was never well till it returned. Instances of this kind, however, are rare and accidental; and it is happy for mankind they are so. Of all other animals, we spend the least time in eating; this is one of the great distinctions between us and the brute creation; and eating is a pleasure of so low a kind, that none but such as are nearly allied to the quadrupede, desire its prolongation.

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C H A P. II.

Of Quadrupedes of the Cow Kind.

OF all ruminant Animals, those of the cow kind deserve the first rank, both for their size, their beauty and their services. The horse is more properly an animal belonging to the rich ; the sheep chiefly thrives in a flock, and requires attendance ; but the cow is more especially the poor man's pride, his riches, and his support. There are many of our peasantry that have no other possession but a cow ; and even of the advantages resulting from this most useful creature, the poor are but the nominal possessors. Its flesh they cannot pretend to taste, since then their whole riches are at once destroyed ; its calf they are obliged to fatten for sale, since veal is a delicacy they could not make any pretensions to ; its very milk is wrought into butter and cheese for the tables of their masters ; while they have no share even in their own possession, but the choice of their market. I cannot bear to hear the rich crying out for liberty, while they thus starve their fellow creatures, and feed them up with an imaginary good, while they monopolize the real benefits of nature.

In

In those countries where the men are under better subordination, this excellent animal is of more general advantage. In Germany, Poland, and Switzerland, every peasant keeps two or three cows, not for the benefit of his master, but for himself. The meanest of the peasants there kills one cow at least for his own table, which he salts and hangs up, and thus preserves as a delicacy all the year round. There is scarce a cottage in those countries that is not hung round with these marks of hospitality ; and which often makes the owner better contented with hunger, since he has it in his power to be luxurious when he thinks proper. A piece of beef hung up there, is considered as an elegant piece of furniture, which, though seldom touched, at least argues the possessor's opulence and ease. But it is very different, for some years past, in this country, where our lower rustics at least are utterly unable to purchase meat any part of the year ; and by them even butter is considered as an article of extravagance.

The climate and pasture of Great Britain, however, are excellently adapted to this animal's moderate nature ; and the verdure and fertility of our plains are perfectly suited to the manner of its feeding ; for wanting the upper fore teeth, it loves to graze in an high
rich

rich pasture. This animal seems but little regardful of the quality of its food, provided it be supplied in sufficient abundance ; it makes no particular distinction in the choice of its herbage, but indiscriminately and hastily devours the proper quantity. For this reason, in our pastures, where the grass is rather high than succulent, more flourishing than nutritious, the cow thrives admirably ; and there is no part of Europe where the tame animal grows so large, yields more milk, or more readily fattens, than with us.

Our pastures supply them with abundance, and they in return enrich the pasture ; for, of all animals, the cow seems to give back more than it takes from the soil. The horse and the sheep are known, in a course of years, to impoverish the ground. The land where they have fed becomes weedy, and the vegetables coarse and unpalatable : on the contrary, the pasture where the cow has been bred, acquires a finer softer surface, and becomes every year more beautiful and even. The reason is, that the horse being furnished with fore teeth in the upper jaw, nips the grass closely, and, therefore, only chuses that which is the most delicate and tender ; the sheep also, though, with respect to its teeth, formed like the cow, only bites the most succulent parts of
the

the herbage: these animals, therefore, leave all the high weeds standing; and while they cut the finer grass too closely, suffer the ranker herbage to vegetate and over-run the pasture. But it is otherwise with the cow; as its teeth cannot come so close to the ground as those of the horse, nor so readily as those of the sheep, which are less, it is obliged to feed upon the tallest vegetables that offer; thus it eats them all down, and, in time, levels the surface of the pasture.

The age of the cow is known by the teeth and horns. This animal is furnished with eight cutting teeth in the lower jaw; at the age of ten months, the two middlemost of these fall out, and are replaced by others, that are not so white, but broader; at the age of sixteen months, the two next milk-white teeth fall out likewise, and others come up in their room: thus, at the end of every six months, the creature loses and gains, till, at the age of three years, all the cutting teeth are renewed, and then they are long, pretty white and equal; but in proportion as the animal advances in years, they become irregular and black, their inequalities become smoother, and the animal less capable of chewing its food. Thus the cow often declines from this single cause; for as it is obliged to eat a great deal to support

port life, and as the smoothness of the teeth makes the difficulty of chewing great, a sufficient quantity of food cannot be supplied to the stomach. Thus the poor animal sinks in the midst of plenty, and every year grows leaner and leaner, till it dies.

The horns are another, and a surer method of determining this animal's age. At three years old, it sheds its horns, and new ones arise in their place, which continue as long as it lives; at four years of age, the cow has small neat smooth horns, thickest near the head; at five the horns become larger, and are marked round with the former year's growth. Thus, while the animal continues to live, the horns continue to lengthen; and every year a new ring is added at the root; so that allowing three years before their appearance, and then reckoning the number of rings, we have in both together the animal's age exactly.

As we have indisputably the best breed of horned cattle of any in Europe, so it was not without the same assiduity that we came to excel in these, as in our horses. The breed of cows has been entirely improved by a foreign mixture, properly adapted to supply the imperfections of our own. Such as are purely British are far inferior in size to those on many parts of the continent; but those

those which we have thus improved, by far excel all others. Our Lincolnshire kind derive their size from the Holstein breed : and the large hornless cattle that are bred in some parts of England, came originally from Poland. We were once famous for a wild breed of these animals, but these have long since been worn out ; and perhaps no kingdom in Europe can furnish so few wild animals of all kinds as our own. Cultivation and agriculture are sure to banish these, wherever they are found ; and every addition a country receives from art, drives away those animals that are only fitted for a state of nature.

Of all quadrupedes, the cow seems most liable to alteration from its pasture. In the different parts of our own country, we easily perceive the great varieties produced among these animals, by the richness or poverty of the soil. In some they grow to a great bulk ; and I have seen an ox sixteen hands high, which is taller than the general run of our horses. In others, they appear as diminutive ; being not so large as an ass. The breed of the Isle of Man, and most parts of Scotland, is much less in general than in England or Ireland : they are differently shaped also, the dewlap being much smaller, and as the expression
is,

is, the beast has more of the ewe neck. This, till some years ago, was considered in cattle as a deformity ; and the cow was chosen, according to Virgil's direction, with a large dewlap : however, at present it is the universal opinion, that the cow wants in udder what it has in neck, and the larger the dewlap, the smaller is the quantity of its milk. Our graziers now, therefore, endeavour to mix the two breeds ; the large Holstein with the small northern ; and from both results that fine milch breed, which excels the cattle of any other part of the world.

This difference, arising from pasture, is more observable in other countries than in our own. The cow kind is to be found in almost every part of the world, large in proportion to the richness of the pasture ; and small, as the animal is stinted in its food. Thus Africa is remarkable for the largest and the smallest cattle of this kind ; as is also India, Poland, Switzerland, and several other parts of Europe. Among the Eluth Tartars, where the pastures are remarkably rich and nourishing, the cow becomes so large, that he must be a tall man who can reach the tip of its shoulder. On the contrary, in France, where the animal is stinted in its food, and driven
from

from the most flourishing pastures it greatly degenerates.

But the differences in the size of this animal are not so remarkable as those which are found in its form, its hair, and its horns. The difference is so very extraordinary in many of them, that they have been even considered as a different kind of creature, and names have been given them as a distinct species, when in reality they are all the same*. In this manner the urus and the bison have been considered, from the variety in their make, to be distinct in their production; but they are all in fact the descendants of one common stock, as they have that certain mark of unity, they breed and propagate among each other. Naturalists have therefore laboured under an obvious error, when because of the extreme bulk of the urus, or because of the hump upon the back of the bison, they assigned them different places in the creation, and separated a class of animals which was really united. It is true, the horse and the ass do not differ so much in form, as the cow and the bison; nevertheless, the former are distinct animals, as their breed is marked with sterility; the latter are animals of the same kind, as their breed is fruitful, and a race of animals is produced, in which

* Buffon, vol. xxiii. p. 78.

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the hump belonging to the bison is soon worn away. The differences, therefore, between the cow, the urus, and the bison, are merely accidental. The same caprice in nature that has given horns to some cows, and denied them to others, may also have given the bison an hump, or encreased the bulk of the urus; it may have given the one a mane, or denied a sufficiency of hair to the other.

But before we proceed farther it may be proper to describe these varieties, which have been thus taken for distinct kinds*. The urus, or wild bull, is chiefly to be met with in the province of Lithuania; and grows to a size, that scarce any other animal, except the elephant, is found to equal. It is quite black, except a stripe mixed with white, that runs from the neck to the tail, along the top of the back; the horns are short, thick and strong; the eyes are fierce and fiery; the forehead is adorned with a kind of garland of black curled hair, and some of them are found to have beards of the same; the neck is short and strong, and the skin has an odour of musk. The female, though not so big as the male, exceeds the largest of our bulls in size; nevertheless, her udder and teats are so small, that they can scarcely be perceived. Upon

* This description is chiefly taken from Klein.



De Sève del.

J. P. Lodge sculp.

The Bison.

the whole, however, this animal resembles the tame one very exactly, except in some trifling varieties, which his state of wildness, or the richness of the pastures where he is found, may easily have produced.

The bison, which is another variety of the cow kind, differs from the rest, in having a lump between its shoulders. These animals are of various kinds; some very large, and others as diminutive. In general, to regard this animal's fore parts, he has somewhat the look of a lion, with a long shaggy mane, and a beard under his chin; his head is little, his eyes red and fiery, with a furious look; the forehead is large, and the horns so big, and so far asunder, that three men might often sit between them. On the middle of the back there grows a bunch almost as high as that of a camel, covered with hair, and which is considered as a great delicacy by those that hunt him. There is no pursuing him with safety, except in forests where there are trees large enough to hide the hunters. He is generally taken by pit-falls; the inhabitants of those countries where he is found wild, digging holes in the ground, and covering them over with boughs of trees and grass; then provoking the bison to pursue them, they get on the opposite side of the pit-fall,

while the furious animal, running head foremost, falls into the pit prepared for him, and is there quickly overcome and slain.

Besides these real distinctions in the cow kind, there have been many others made, that appear to be in name only. Thus the *bonafus*, of which naturalists have given us long descriptions, is supposed by Klein and Buffon to be no more than another name for the bison, as the descriptions given of them by the ancients coincide. The *bubalus* also of the ancients, which some have supposed to belong to the cow kind, Buffon places among the lower class of ruminant quadrupedes, as it most resembles them in size, shape, and the figure of its horns. Of all the varieties, therefore, of the cow kind, there are but two that are really distinct; namely, the cow, and the buffalo: these two are separated by nature; they seem to bear an antipathy to each other; they avoid each other, and may be considered as much removed as the horse is from the ass or the zebra. When, therefore, we have described the varieties of the cow kind, we shall pass on to the buffalo, which being a different animal, requires a separate history.

There is scarce a part of the world, as was said before, in which the cow is not found

found in some one of its varieties ; either large, like the urus, or humped as the bison ; with strait horns, or bending, inverted backwards, or turning side-ways to the cheek, like those of the ram ; and in many countries, they are found without any horns whatsoever. But to be more particular, beginning at the north, the few kine which subsist in Iceland, are without horns, although of the same race originally with ours. The size of these is rather relative to the goodness of the pasture, than the warmth or coldness of the climate. The Dutch frequently bring great quantities of lean cattle from Denmark, which they fatten on their own rich grounds. These are in general of a larger size than their own natural breed ; and they fatten very easily. The cattle of the Ukraine, where the pasture is excellent, become very fat, and are considered as the largest breed of all Europe. In Switzerland, where the mountains are covered with a rich nourishing herbage, which is entirely reserved for their kine, these animals grow to a very large size. On the contrary, in France, where they get no other grass but what is thought unfit for horses, they dwindle, and grow lean. In some parts of Spain, the cow grows to a good size ; those wild bulls, however, which they pride themselves so

much in combating, are a very mean despicable little animal, and somewhat shaped like one of our cows, with nothing of that peculiar sternness of aspect for which our bulls are remarkable. In Barbary and the provinces of Africa, where the ground is dry, and the pasturage short, the cows are of a very small breed, and give milk in proportion. On the contrary, in Ethiopia, they are of a prodigious bigness. The same holds in Persia and Tartary ; where in some places, they are very small, and, in others, of an amazing stature. It is thus, in almost every part of the world, this animal is found to correspond in size to the quantity of its provision.

If we examine the form of these animals, as they are found tame, in different regions, we shall find, that the breed of the urus, or those without an hump, chiefly occupies the cold and the temperate zones, and is not so much dispersed towards the south. On the contrary, the breed of the bison, or the animal with an hump, is found in all the southern parts of the world ; throughout the vast continent of India ; throughout Africa, from Mount Atlas to the Cape of Good Hope. In all these countries, the bison seems chiefly to prevail ; where they are found to have a smooth soft hair, are very nimble

nimble of foot, and in some measure supply the want of horses. The bison breed is also more expert and docile than ours; many of them, when they carry burthens, bend their knees to take them up, or set them down: they are treated, therefore by the natives of those countries, with a degree of tenderness and care equal to their utility; and the respect for them in India has been carried even to a blind adoration. But it is among the Hottentots where these animals are chiefly esteemed, as being more than commonly serviceable. They are their fellow domestics, the companions of their pleasures and fatigues; the cow is at once the Hottentot's protector and servant, assists him in tending his flocks, and guarding them against every invader; while the sheep are grazing, the faithful backely, as this kind of cow is called, stands or grazes beside them: still, however, attentive to the looks of its master, the backely flies round the field, herds in the sheep that are straying, obliges them to keep within proper limits, and shews no mercy to robbers, or even strangers who attempt to plunder. But it is not the plunderers of the flock alone, but even the enemies of the nation, that these backelys are taught to combat. Every army of Hottentots is furnished with a proper herd of these, which

which are let loose against the enemy, when the occasion is most convenient. Being thus sent forward, they overturn all before them; they strike every opposer down with their horns, and trample upon them with their feet; and thus often procure their masters an easy victory, even before they have attempted to strike a blow. An animal so serviceable, it may be supposed, is not without its reward. The backely lives in the same cottage with its master, and, by long habit gains an affection for him; and in proportion as the man approaches to the brute, so the brute seems to attain even to some share of human sagacity. The Hot-tentot and his backely thus mutually assist each other; and when the latter happens to die, a new one is chosen to succeed him, by a council of the old men of the village. The new backely is then joined with one of the veterans of his own kind, from whom he learns his art, becomes social and diligent, and is taken for life into human friendship and protection.

The bisons, or cows with an hump, are found to differ very much from each other in the several parts of the world where they are found. The wild ones of this kind, are much larger than the tame. Some have horns, and some are without
any;

any ; some have them depressed, and some raised in such a manner that they are useless as weapons of annoyance or defence ; some are extremely large ; and others among them, such as the zebu, or Barbary cow, are very small. They are all, however, equally docile and gentle when tamed ; and in general, furnished with a fine lustrous soft hair, more beautiful than that of our own breed ; their hump is also of different sizes, in some weighing from forty to fifty pounds, in others less ; it is not, however, to be considered as a part necessarily belonging to the animal ; and probably it might be cut away without much injury : it resembles a gristly fat ; and as I am assured, cuts and tastes somewhat like a dressed udder. The bisons of Malabar, Abyssinia, and Madagascar, are of the great kind, as the pastures there are plentiful. Those of Arabia Petræa, and most parts of Africa, are small and of the zebu or little kind. In America, especially towards the north, the bison is well known. The American bison, however, is found to be rather less than that of the ancient continent ; its hair is longer and thicker, its beard more remarkable, and its hide more lustrous and soft. There are many of them brought up tame in Carolina ; however, their wild dispositions still seem to continue,

continue, for they break through all fences to get into the corn-fields, and lead the whole tame herd after them, wherever they penetrate. They breed also with the tame kinds originally brought over from Europe; and thus produce a race peculiar to that country.

From all this it appears*, that naturalists have given various names to animals in reality the same, and only differing in some few accidental circumstances. The wild cow and the tame, the animal belonging to Europe, and that of Asia, Africa, and America, the bonafus and the urus, the bison and the zebu, are all one and the same, propagate among each other, and, in the course of a few generations, the hump wears away, and scarce any vestiges of savage fierceness are found to remain. Of all animals, therefore, except man alone, the cow seems most extensively propagated. Its nature seems equally capable of the rigours of heat and cold. It is an inhabitant as well of the frozen fields of Iceland, as the burning deserts of Lybia. It seems an ancient inmate in every climate, domestic and tame in those countries which have been civilized, savage and wild in the countries which are less peopled, but capable of being

* Buffon, vol. xxiii. p. 130.

made useful in all : able to defend itself in a state of nature against the most powerful enemy of the forest ; and only subordinate to man, whose force it has experienced, and whose aid it at last seems to require. However wild the calves are which are taken from the dam in a savage state, either in Africa or Asia, they soon become humble, patient, and familiar, and man may be considered, in those countries, as almost helpless without their assistance. Other animals preserve their nature or their form with inflexible perseverance ; but these, in every respect, suit themselves to the appetites and conveniences of mankind ; and as their shapes are found to alter, so also does their nature ; in no animal is there seen a greater variety of kinds, and in none a more humble and pliant disposition,

T H E B U F F A L O.

IF we should compare the shape of our common cow with that of the bison, the difference will appear very great. The shaggy mane of the latter, the beard, the curled forehead, the inverted horns, the broad breast, and the narrow hinder parts, give it the appearance rather of a lion than
a cow ;

a cow ; and fit it more for a state of war with mankind, than a state of servitude. Yet, notwithstanding these appearances, both animals are found to be the same ; or at least so nearly allied, that they breed among each other, and propagate a race that continues the kind.

On the other hand, if we compare the buffalo with our common cow, no two animals can be more nearly alike, either in their form or their nature ; both equally submissive to the yoke, both often living under the same roof, and employed in the same domestic services ; the make and the turn of their bodies so much alike, that it requires a close attention to distinguish them : and yet after all this, no two animals can be more distinct, or seem to have stronger antipathies to each other*. Were there but one of each kind remaining, it is probable the race of both would shortly be extinct. However, such is the fixed aversion formed between these creatures, that the cow refuses to breed with the buffalo, which it nearly resembles ; while it is known to propagate with the bison, to which it has, in point of form, but a very distant similitude.

The buffalo is, upon the whole, by no means, so beautiful a creature as the cow ;

* Buffon:

his figure is more clumsy and awkward ; his air is wilder ; and he carries his head lower, and nearer the ground ; his limbs are less fleshy, and his tail more naked of hair ; his body is shorter and thicker than that of the cow kind ; his legs are higher ; his head smaller, his horns not so round, black, and compressed, with a bunch of curled hair hanging down between them ; his skin is also harder and thicker, more black, and less furnished with hair, his flesh, which is hard and blackish, is not only disagreeable to the taste, but likewise to the smell. The milk of the female is by no means so good as that of the cow ; it is however produced in great abundance. In the warm countries, almost all their cheese is made of the milk of the buffalo ; and they supply butter also in large quantities. The veal of the young buffalo is not better eating than the beef of the old. The hide of this animal seems to be the most valuable thing he furnishes. The leather made of it is well known for its thickness, softness, and impenetrability. As these animals are, in general, larger and stronger than the cow, they are usefully employed in agriculture. They are used in drawing burthens, and sometimes in carrying them ; being guided by a ring, which is thrust through their nose. Two buffaloes yoked
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in a waggon are said to draw more than four horses ; as their heads and necks are naturally bent downward, they are thus better fitted for the draught, and the whole weight of their bodies is applied to the carriage that is to be drawn forward.

From the size and bulk of the buffalo, we may be easily led to conclude that he is a native of the warmer climates. The largest quadrupedes are generally found in the torrid zone ; and the buffalo is inferior, in point of size, only to the elephant, the rhinoceros, or the hippopotamos. The camelopard, or the camel, may, indeed, be taller, but they are neither so long, or near so corpulent. Accordingly, we find this animal wild in many parts of India ; and tamed also wherever the natives have occasion for his services. The wild buffaloes are very dangerous animals, and are often found to gore travellers to death, and then trample them with their feet, until they have entirely mangled the whole body : however, in the woods they are not so much to be feared as in the plains, because in the violence of their pursuit their large horns are apt to be entangled in the branches of the trees, which gives those who have been surprized by them, time to escape the danger. There is scarce any other method

method of avoiding their pursuit; they run with great swiftness; they overturn a tree of moderate growth; and are such swimmers, as to cross the largest rivers without any difficulty. In this manner, like all other large animals of the torrid zone, they are very fond of the water; and, in the midst of their pursuit, often plunge in, in order to cool themselves. The Negroes of Guinea, and the Indians of Malabar, where buffaloes are in great abundance, take great delight in hunting and destroying them; however, they never attempt to face the buffalo openly, but, generally climbing up a tree, shoot at him from thence, and do not come down till they find they have effectually dispatched him. However, when they are tamed, no animal can be more patient or humble; and though by no means so docile as the cow kind, yet they go through domestic drudgeries with more strength and perseverance.

Although these animals are chiefly found in the torrid zone, yet they are bred in several parts of Europe, particularly in Italy, where they make the food and riches of the poor. The female produces but one at a time, in the same manner as the cow; but they are very different in the times of gestation; for the cow, as we know, goes
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but nine months ; whereas the buffalo continues pregnant for twelve. They are all afraid of fire ; and perhaps, in consequence of this, have an aversion to red colours, that resemble the colour of flame : it is said, that in those countries where they are found in plenty, no person dares to dress in scarlet. In general they are inoffensive animals, if undisturbed ; as indeed all those which feed upon grass are found to be ; but when they are wounded, or when even but fired at, nothing then can stop their fury ; they then turn up the ground with their fore feet, bellow much louder and more terribly than the bull, and make at the object of their resentment with ungovernable rage. It is happy, in such circumstances, if the person they pursue has a wall to escape over, or some such obstacle, otherwise they soon overtake, and instantly destroy him. It is remarkable, however, that although their horns are so very formidable, they in general make more use of their feet in combat, and rather tread their enemies to death than gore them.

Having thus gone through the history of these animals, it may be proper to observe, that no names have been more indiscriminately used than those of the bull, the urus, the bison, and the buffalo. It therefore becomes such as would have distinct
ideas

ideas of each, to be careful in separating the kinds, the one from the other, allowing the cow for the standard of all. The urus, whether of the large enormous kind of Lithuania, or the smaller race of Spain, whether with long or short horns, whether with or without long hair in the forehead, is every way the same with what our common breed was before they were taken from the forest, and reduced to a state of servitude. The bison, and all its varieties, which are known by an hump between the shoulders, is also to be ranked in the same class. This animal, whether with crooked or strait horns, whether they be turned towards the cheek or totally wanting, whether it be large or diminutive, whatever be its colour, or whatever the length of its hair, whether called the bonafus by some, or the bubalus by others, is but a variety of the cow kind, with whom it breeds, and with whom of consequence it has the closest connection. Lastly, the buffalo, though shaped much more like the cow, is a distinct kind by itself, that never mixes with any of the former; that goes twelve months with young; whereas the cow goes but nine; that testifies an aversion to the latter; and, though bred under the same roof, or feeding in the same pasture, has always kept

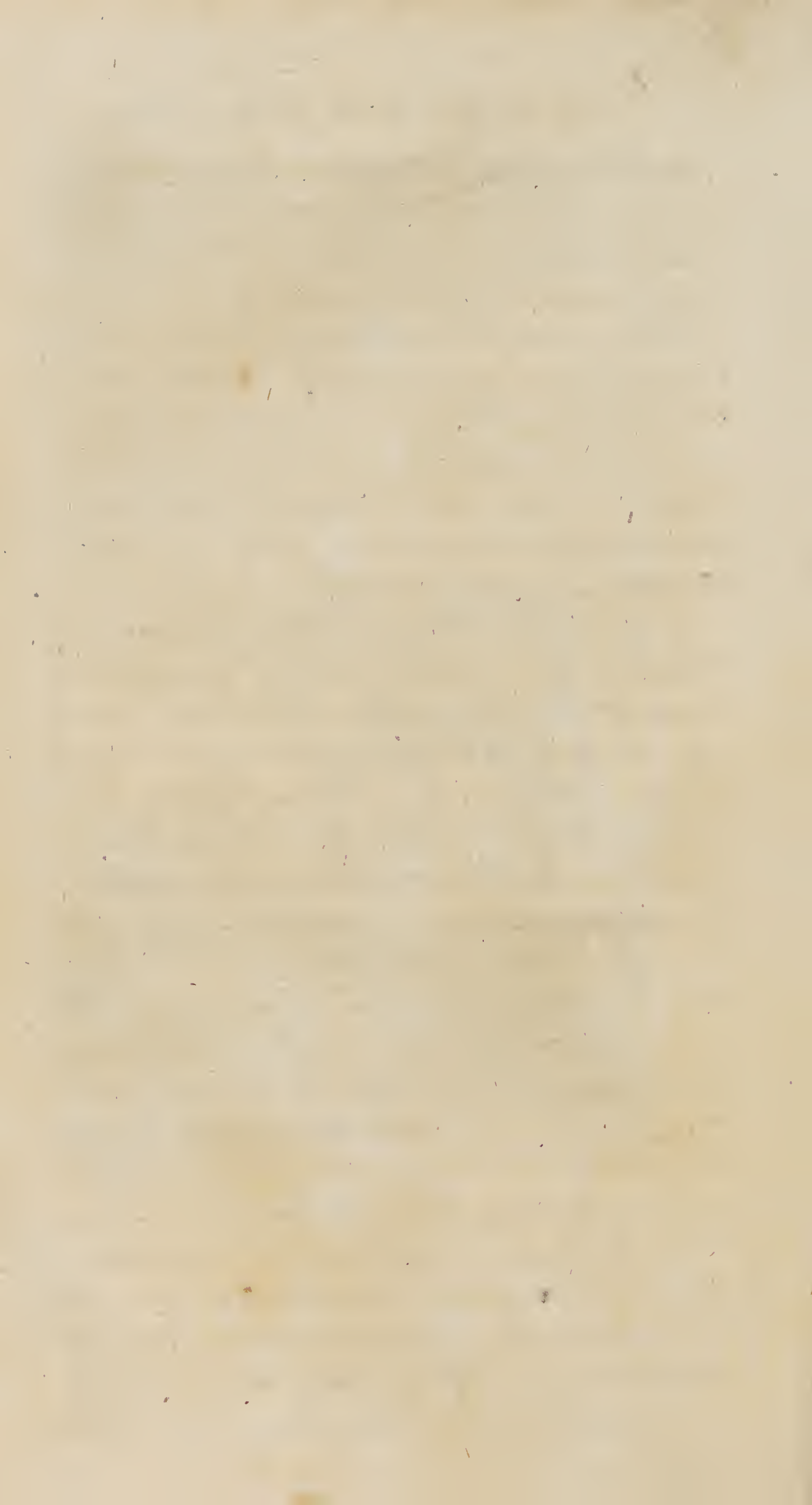
kept separate ; and makes a distinct race in all parts of the world. These two kinds are supposed to be the only real varieties in the cow kind, of which naturalists have given so many varieties. With respect to some circumstances mentioned by travellers, such as that of many kinds defending themselves by voiding their dung against their pursuers ; this is a practice which they have in common with other timid creatures when pursued, and arises rather from fear than a desire of defence. The musky smell also by which some have been distinguished, is found common to many of these kinds, in a state of nature ; and does not properly make the characteristic marks of any. The particular kind of noise also which some of them are known to make, which rather resembles grunting than bellowing or lowing, is but a savage variety, which many wild animals have, and yet lose when brought into a state of tameness. For these reasons, Mr. Buffon, whom I have followed in this description, is of my opinion, that the zebu, or little African cow, and the grunting, or Siberian cow, are but different races of the bison ; as the shape of the horns, or the length of the hair, are never properly characteristic marks of any animal, but are found to vary with climate, food, and cultivation.



De Seve del.

Jno Lodge sculp.

The Zebu.



In this manner the number of animals of the cow kind, which naturalists have extended to eight or ten sorts, are reduced to two; and as the utmost deference is paid to the opinion of Mr. Buffon in this particular, I have taken him for my guide. Nevertheless, there is an animal of the cow kind, which neither he, nor any other naturalist that I know of, has hitherto described, yet which makes a very distinct class, and may be added as a third species.

This animal was shewn some years ago in London, and seemed to unite many of the characteristics of the cow and the hog; having the head, the horns, and the tail of the former; with the bristles, the colour, and the grunting of the latter. It was about the size of an ass, but broader and thicker; the colour resembling that of an hog, and the hair bristly, as in that animal. The hair upon the body was thin, as in the hog; and a row of bristles ran along the spine, rather shorter and softer than in the hog kind. The head was rather larger than that of a cow; the teeth were entirely resembling those of that animal, and the tongue was rough in like manner. It fed upon hay; and, consequently, its internal conformation must have resembled that of the cow kind more than the hog,

whose food is always chosen of a kind more succulent. The eyes were placed in the head as with the cow, and were pretty nearly of the same colour; the horns were black and flattish, but bent rather backwards to the neck, as in the goat kind; the neck was short and thick, and the back rather rising in the middle; it was cloven footed, like the cow, without those hinder claws that are found in the hog kinds. But the greatest variety of all in this extraordinary creature, which was a female, was, that it had but two teats, and, consequently, in that respect, resembled neither of the kinds to which, in other circumstances, it bore so strong a similitude. Whether this animal was a distinct kind, or a monster, I will not pretend to say; it was shewn under the name of the bonafus; and it was said, by the person who shewed it, to have come from India: but no credit is to be given to interested ignorance; the person only wanted to make the animal appear as extraordinary as possible; and I believe would scarcely scruple a lie or two, to encrease that wonder in us, by which he found the means of living.

C H A P. III.

Of Animals of the Sheep and Goat Kind.

AS no two animals are found entirely the same, so it is not to be expected that any two races of animals should exactly correspond in every particular. The goat and the sheep are apparently different, in the form of their bodies, in their covering, and in their horns. They may from hence be considered as two different kinds, with regard to all common and domestic purposes. But if we come to examine them closer, and observe their internal conformation, no two animals can be more alike; their feet, their four stomachs, their suet, their appetites, all are entirely the same, and shew the similitude between them: but what makes a much stronger connection is, that they propagate with each other. The buck goat is found to produce with the ewe an animal that in two or three generations returns to the sheep, and seems to retain no marks of its ancient progenitor*. The sheep and the goat, therefore, may be considered as belonging to one family; and were the whole races reduced to one of

* Buffon passim.

each, they would quickly replenish the earth with their kind.

If we examine the sheep and goat internally, we shall find, as was said, that their conformation is entirely the same; nor is their structure very remote from that of the cow kind, which they resemble in their hoofs, and in their chewing the cud. Indeed, all ruminant animals are internally much alike. The goat, the sheep, or the deer, exhibit to the eye of the anatomist the same parts in miniature, which the cow or the bison exhibit in the great. But the differences between those animals are, nevertheless, sufficiently apparent. Nature has obviously marked the distinctions between the cow and the sheep kind, by their form and size; and they are also distinguished from those of the deer kind, by never shedding their horns. Indeed the form and figure of these animals, if there were nothing else, would seldom fail of guiding us to the kind; and we might almost, upon sight, tell which belongs to the deer kind, and which are to be degraded into that of the goat. However, the annually shedding the horns in the deer, and the permanence in the sheep, draws a pretty exact line between the kinds; so that we may hold to this distinction only, and define the sheep and goat kind

kind as ruminant animals of a smaller size, that never shed their horns.

If we consider these harmless and useful animals in one point of view, we shall find that both have been long reclaimed, and brought into a state of domestic servitude. Both seem to require protection from man ; and are in some measure pleased with his society. The sheep indeed, is the more serviceable creature of the two ; but the goat has more sensibility and attachment. The attending upon both was once the employment of the wisest and the best of men ; and those have been ever supposed the happiest times, in which these harmless creatures were considered as the chief objects of human attention. In the earliest ages, the goat seemed rather the greater favourite ; and, indeed it continues such to this day among the poor. However, the sheep has long since become the principal object of human care ; while the goat is disregarded by the generality of mankind, or become the possession only of the lowest of the people. The sheep, therefore, and its varieties, may be considered first ; and the goat with all those of its kind, will then properly follow.

THE SHEEP.

THOSE animals that take refuge under the protection of man, in a few generations become indolent and helpless. Having lost the habit of self defence, they seem to lose also the instincts of nature. The sheep, in its present domestic state, is of all animals the most defenceless and inoffensive. With its liberty it seems to have been deprived of its swiftness and cunning; and what in the ass might rather be called patience, in the sheep appears to be stupidity. With no one quality to fit it for self-preservation, it makes vain efforts at all. Without swiftness, it endeavours to fly; and without strength, sometimes offers to oppose. But these feeble attempts rather incite than repress the insults of every enemy; and the dog follows the flock with greater delight upon seeing them fly, and attacks them with more fierceness upon their unsupported attempts at resistance. Indeed they run together in flocks; rather with the hopes of losing their single danger in the crowd, than of uniting to repress the attack by numbers. The sheep, therefore, were it exposed in its present state to struggle with its natural enemies of the forest, would
soon

soon be extirpated. Loaded with an heavy fleece, deprived of the defence of its horns, and rendered heavy, slow, and feeble, it can have no other safety but what it finds from man. This animal is now, therefore, obliged to rely solely upon that art for protection, to which it originally owes its degradation.

But we are not to impute to Nature the formation of an animal so utterly unprovided against its enemies, and so unfit for defence. The moufflon, which is the sheep in a savage state, is a bold, fleet creature, able to escape from the greater animals by its swiftness, or to oppose the smaller kinds with the arms it has received from Nature. It is by human art alone that the sheep is become the tardy defenceless creature we find it. Every race of quadrupedes might easily be corrupted by the same allurements by which the sheep has been thus debilitated and depressed. While undisturbed, and properly supplied, none are found to set any bounds to their appetites. They all pursue their food while able, and continue to graze, till they often die of disorders occasioned by too much fatness. But it is very different with them in a state of nature: they are in the forest surrounded by dangers, and alarmed with unceasing hostilities; they
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are pursued every hour from one tract of country to another; and spend a great part of their time in attempts to avoid their enemies. Thus constantly exercised, and continually practising all the arts of defence and escape, the animal at once preserves its life and native independence, together with its swiftness, and the slender agility of its form.

The sheep, in its servile state, seems to be divested of all inclinations of its own; and of all animals it appears the most stupid. Every quadrupede has a peculiar turn of countenance, a physiognomy, if we may so call it, that generally marks its nature. The sheep seems to have none of those traits that betoken either courage or cunning; its large eyes, separated from each other, its ears sticking out on each side, and its narrow nostrils, all testify the extreme simplicity of this creature; and the position of its horns also, shew that Nature designed the sheep rather for flight than combat. It appears a large mass of flesh, supported upon four small strait legs, ill fitted for carrying such a burthen; its motions are awkward, it is easily fatigued, and often sinks under the weight of its own corpulency. In proportion as these marks of transformation are more numerous, the animal becomes more helpless and stupid.

stupid. Those which live upon a more fertile pasture and grow fat, become entirely feeble ; those that want horns, are found more dull and heavy than the rest * ; those whose fleeces are longest and finest, are most subject to a variety of disorders ; and in short, whatever changes have been wrought in this animal by the industry of man, are entirely calculated for human advantage, and not for the creature itself. It might require a succession of ages, before the sheep could be restored to its primitive state of activity, so as to become a match for its pursuers of the forest.

The goat, which it resembles in so many other respects, is much its superior. The one has its particular attachments, sees danger, and generally contrives to escape it ; but the other is timid without a cause, and secure when real danger approaches. Nor is the sheep, when bred up tame in the house, and familiarized with its keepers, less obstinately absurd : from being dull and timid, it then acquires a degree of pert familiarity ; but with its head, becomes mischievous, and shews itself every way unworthy of being singled out from the rest of the flock. Thus it seems rather formed for slavery than friendship ; and framed more for the necessities than the

* Daubenton upon the sheep.

amusements of mankind. There is but one instance in which the sheep shews any attachment to its keeper; and that is seen rather on the continent, than among us in Great Britain. What I allude to is their following the sound of the shepherd's pipe. Before I had seen them trained in this manner, I had no conception of those descriptions in the old pastoral poets, of the shepherd leading his flock from one country to another. As I had been used only to see these harmless creatures driven before their keepers, I supposed that all the rest was but invention: but in many parts of the Alps, and even in some provinces of France, the shepherd and his pipe are still continued with true antique simplicity. The stock is regularly penned every evening, to preserve them from the wolf; and the shepherd returns homeward at sun-set, with his sheep following him, and seemingly pleased with the sound of the pipe, which is blown with a reed, and resembles the chanter of a bagpipe. In this manner, in those countries that still continue poor, the Arcadian life is still preserved in all its former purity; but in countries where a greater inequality of conditions prevail, the shepherd is generally some poor wretch who attends a flock from which he is to derive no benefits,
and

and only guards those luxuries which he is not fated to share.

It does not appear, from early writers, that the sheep was bred in Britain; and it was not till several ages after this animal was cultivated, that the woollen manufacture was carried on among us*. That valuable branch of business lay for a considerable time in foreign hands; and we were obliged to import the cloth, manufactured from our own materials. There were notwithstanding, many unavailing efforts among our kings to introduce and preserve the manufacture at home. Henry the Second, by a patent granted to the weavers in London, directed, that if any cloth was found made of a mixture of Spanish wool, it should be burned by the mayor. Such edicts at length, although but slowly, operated towards the establishing this trade among us. The Flemings, who at the revival of arts possessed the art of cloth-working in a superior degree, were invited to settle here; and, soon after, foreign cloth was prohibited from being worn in England. In the times of queen Elizabeth, this manufacture received every encouragement; and many of the inhabitants of the Netherlands being then forced by the tyranny of Spain, to take refuge in this

* British Zoology, vol. i. p. 23.

country, they improved us in those arts, in which we at present excel the rest of the world. Every art, however, has its rise, its meridian, and its decline ; and it is supposed by many, that the woollen manufacture has for some time been decaying amongst us. The cloth now made is thought to be much worse than that of some years past ; being neither so firm nor so fine, neither so much courted abroad, nor so serviceable at home.

No country, however, produces such sheep as England ; either with larger fleeces, or better adapted for the business of cloathing. Those of Spain, indeed, are finer, and we generally require some of their wool to work up with our own ; but the weight of a Spanish fleece is no way comparable to one of Lincoln or Warwickshire ; and in those counties, it is no uncommon thing to give fifty guineas for a ram.

The sheep without horns are counted the best sort, because a great part of the animal's nourishment is supposed to go up into the horns*. Sheep, like other ruminant animals, want the upper fore teeth ; but have eight in the lower jaw : two of these drop, and are replaced at two years old ; four of them are replaced at three years old ; and

* Lisle's Husbandry, vol. ii. p. 155.

all at four. The new teeth are easily known from the rest by their freshness and whiteness. There are some breeds, however, in England, that never change their teeth at all; these the shepherds call the leather mouthed cattle; and, as their teeth are thus longer wearing, they are generally supposed to grow old a year or two before the rest*. The sheep bring forth one or two at a time; and sometimes three or four. The first lamb of an ewe is generally pot-bellied, short, and thick, and of less value than those of a second or third production; the third being supposed the best of all. They bear their young five months; and, by being housed, they bring forth at any time of the year.

But this animal in its domestic state, is too well known to require a detail of its peculiar habits, or of the arts which have been used to improve the breed. Indeed, in the eye of an observer of Nature, every art which tends to render the creature more helpless and useless to itself, may be considered rather as an injury than an improvement; and if we are to look for this animal in its noblest state, we must seek for it in the African desert, or the extensive plains of Siberia. Among the degenerate

* Lisle's Husbandry, vol. ii. p. 155.

descendants of the wild sheep, there have been so many changes wrought, as entirely to disguise the kind, and often to mislead the observer. The variety is so great that scarce any two countries has its sheep of the same kind; but there is found a manifest difference in all, either in the size, the covering, the shape, or the horns.

The woolly sheep*, as it is seen among us, is found only in Europe, and some of the temperate provinces of Asia. When transported into warmer countries, either into Florida or Guinea, it loses its wool, and assumes a covering fitted to the climate, becoming hairy and rough; it there also loses its fertility, and its flesh no longer has the same flavour. In the same manner, in the very cold countries, it seems equally helpless and a stranger; it still requires the unceasing attention of mankind for its preservation: and although it is found to subsist, as well in Greenland as in Guinea†, yet it seems a natural inhabitant of neither.

Of the domestic kinds to be found in the different parts of the world, besides our own, which is common in Europe, the first variety is to be seen in Iceland, Muscovy, and the coldest climates of the north. This, which may be called the Iceland sheep,

* Buffon, vol. xxiii. p. 168.

† Kraitz.

resembles our breed, in the form of the body and the tail; but differs in a very extraordinary manner in the number of the horns; being generally found to have four, and sometimes even eight, growing from different parts of the forehead. These are large and formidable; and the animal seems thus fitted by Nature for a state of war: however, it is of the nature of the rest of its kind, being mild, gentle, and timid. Its wool is very different also, from that of the common sheep, being long, smooth and hairy. Its colour is of a dark brown; and under its outward coat of hair, it has an internal covering, that rather resembles fur than wool, being fine, short, and soft.

The second variety to be found in this animal, is that of the broad tail'd sheep, so common in Tartary, Arabia, Persia, Barbary, Syria, and Egypt. This sheep is only remarkable for its large and heavy tail, which is often found to weigh from twenty to thirty pounds. It sometimes grows a foot broad, and is obliged to be supported by a small kind of board, that goes upon wheels. This tail is not covered underneath with wool, like the upper part, but is bare; and the natives, who consider it as a very great delicacy, are very careful in

in attendnig and preserving it from injury. Mr. Buffon supposes that the fat which falls into the caul in our sheep, goes in these to furnish the tail; and that the rest of the body is from thence deprived of fat in proportion. With regard to their fleeces, in the temperate climates, they are, as in our own breed, soft and woolly; but in the warmer latitudes, they are hairy: yet in both they preserve the enormous size of their tails.

The third observable variety is that of the sheep called strepsicheros. This animal is a native of the islands of the Archipelago, and only differs from our sheep, in having strait horns, surrounded with a spiral furrow.

The last variety is that of the Guinea sheep, which is generally found in all the tropical climates, both of Africa and the East-Indies. They are of a large size, with a rough hairy skin, short horns, and ears hanging down, with a kind of dewlap under the chin. They differ greatly in form from the rest; and might be considered as animals of another kind, were they not known to breed with other sheep. These of all the domestic kinds, seem to approach the nearest to the state of nature. They are larger, stronger, and swifter than the common race; and, consequently, better fitted for a precarious forest life. However, they seem to rely,
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De Sève del.

Jr. Lodge sculp.

The Moufflon.

like the rest, on man for support; being entirely of a domestic nature, and subsisting only in the warmer climates.

Such are the varieties of this animal, which have been reduced into a state of domestic servitude. These are all capable of producing among each other; all the peculiarities of their form have been made by climate and human cultivation; and none of them seem sufficiently independent, to live in a state of savage nature. They are, therefore, to be considered, as a degenerate race, formed by the hand of man, and propagated merely for his benefit. At the same time, while man thus cultivates the domestic kinds, he drives away and destroys the savage race, which are less beneficial, and more head-strong. These, therefore, are to be found in but a very small number, in the most uncultivated countries, where they have been able to subsist by their native swiftness and strength. It is in the more uncultivated parts of Greece, Sardinia, Corsica, and particularly in the desarts of Tartary, that the mufson is to be found, that bears all the marks of being the primitive race; and that has been actually known to breed with the domestic animal.

The mouffon, or musmon, though covered with hair, bears a stronger similitude

to the ram than to any other animal; like the ram, it has the eyes placed near the horns; and its ears are shorter than those of the goat: it also resembles the ram in its horns, and in all the particular outlines of its form. The horns also are alike; they are of a yellow colour; they have three sides, as in the ram, and bend backwards in the same manner behind the ears. The muzzle, and the inside of the ears, are of a whitish colour tinged with yellow; the other parts of the face are of a brownish grey. The general colour of the hair over the body is of a brown, approaching to that of the red deer. The inside of the thighs and belly are of a white tinged with yellow. The form upon the whole, seems more made for agility and strength than that of the common sheep; and the moufflon is actually found to live in a savage state, and maintain itself either by force or swiftness against all the animals that live by rapine. Such is the extreme speed, that many have been inclined rather to rank it among the deer kind, than the sheep. But in this they are deceived, as the musmon has a mark that entirely distinguishes it from that species, being known never to shed its horns. In some these are seen to grow to a surprizing size; many of them measuring
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in their convolutions, above two ells long. They are of a yellow colour, as was said; but the older the animal grows, the darker the horns become: with these they often maintain very furious battles between each other; and sometimes they are found broken off in such a manner, that the small animals of the forest creep into the cavity for shelter*. When the musmon is seen standing on the plain, his fore legs are always strait, while his hinder legs seem bent under him; but in cases of more active necessity, this seeming deformity is removed, and he moves with great swiftness and agility. The female very much resembles the male of this species, but that she is less, and her horns also are never seen to grow to that prodigious size they are of in the wild ram. Such is the sheep in its savage state; a bold, noble, and even beautiful animal: but it is not the most beautiful creatures that are always found most useful to man. Human industry has therefore destroyed its grace, to improve its utility.

* Gmelin, as quoted by Buffon.

THE GOAT,

AND ITS NUMEROUS VARIETIES.

THERE are some domestic animals that seem as auxiliaries to the more useful sorts; and, that by ceasing to be the first, are considered as nothing. We have seen the services of the ass slighted, because inferior to those of the horse; and, in the same manner, those of the goat are held cheap, because the sheep so far exceeds it. Were the horse or the sheep removed from nature, the inferior kinds would then be invaluable; and the same arts would probably be bestowed in perfecting their kinds, that the higher order of animals have experienced. But in their present neglected state, they vary but little from the wild animals of the same kind; man has left them their primitive habits and forms; and the less they owe to his assiduity, the more they receive from nature.

The goat seems, in every respect, more fitted for a life of savage liberty than the sheep*. It is naturally more lively, and more possessed with animal instinct. It easily attaches itself to man, and seems sensible of his caresses. It is also stronger

* Buffon.

and swifter, more courageous, and more playful, lively, capricious, and vagrant: it is not easily confined to its flock, but chuses its own pastures, and loves to stray remote from the rest. It chiefly delights in climbing precipices; in going to the very edge of danger: it is often seen suspended upon an eminence hanging over the sea, upon a very little base, and even sleeps there in security. Nature has, in some measure, fitted it for traversing these declivities with ease; the hoof is hollow underneath, with sharp edges, so that it walks as securely on the ridge of an house, as on the level ground. It is an hardy animal, and very easily sustained; for which reason it is chiefly the property of the poor, who have no pastures with which to supply it. Happily, however, it seems better pleased with the neglected wild, than the cultivated fields of art; it chuses the heathy mountain, or the shrubby rock; its favourite food is the tops of the boughs, or the tender bark of young trees: it seems less afraid of immoderate heat, and bears the warm climates, better than the sheep: it sleeps exposed to the sun; and seems to enjoy its warmest fervours; neither is it terrified at the storm, or incommoded by the rain; immoderate cold alone seems to affect it, and is said to produce

produce a vertigo, with which this animal is sometimes incommoded. The inconstancy of its nature is perceivable in the irregularity of its gait; it goes forward, stops, runs, approaches, flies, merely from caprice, and with no other seeming reason than the extreme vivacity of its disposition.

There are proofs of this animal's being naturally the friend of man; and that the goat seldom resumes its primæval wildness, when once reduced into a state of servitude. In the year 1698, an English vessel happening to touch at the islands of Bonavista, two Negroes came, and offered the sailors as many goats as they chose to take away. Upon the captain's expressing his astonishment at this offer, the Negroes assured him that there were but twelve persons in the island, and that the goats were multiplied in such a manner, as even to become a nuisance: they added, that instead of giving any trouble to catch them, they followed the few inhabitants that were left with a sort of obstinacy, and rather became importunate with their tameness.

The goat produces but two at a time; and three at the most. But in the warmer climates, although the animal degenerates, and grows less, yet it becomes more fruitful, being generally found to bring forth three,
four,

four, and five at a single delivery. The buck is capable of propagating at the age of one year, and the female at seven months; however, the fruits of this premature generation are weak and defective; and their best breeding time is generally delayed till the age of two years, or eighteen months at least. One buck is sufficient for an hundred and fifty goats; his appetites are excessive: but this ardour brings on a speedy decay, so that he is enervated in four years at most, and even becomes old before he reaches his seventh year. The goat, like the sheep, continues five months with young; and, in some places, bears twice a year.

The milk of the goat is sweet, nourishing, and medicinal; not so apt to curdle upon the stomach as that of the cow; and, therefore, preferable to those whose digestion is but weak. The peculiarity of this animal's food, gives the milk a flavour different from that either of the cow or sheep; for as it generally feeds upon shrubby pastures, and heathy mountains, there is an agreeable wildness in the taste very pleasing to such as are fond of that aliment. In several parts of Ireland, and the highlands of Scotland, the goat makes the chief possession of the inhabitants. On those mountains, where no other useful animal could find subsistence,

sistence the goat continues to glean a sufficient living ; and supplies the hardy natives with what they consider as varied luxury. They lie upon beds made of their skins, which are soft, clean, and wholesome ; they live upon their milk, with oat bread ; they convert a part of it into butter, and some into cheese ; the flesh, indeed, they seldom taste of, as it is a delicacy which they find too expensive ; however, the kid is considered even by the city epicure, as a great rarity ; and the flesh of the goat, when properly prepared, is ranked by some as no way inferior to venison. In this manner, even in the wildest solitudes, the poor find comforts of which the rich do not think it worth their whiles to dispossess them ; in these mountainous retreats, where the landscape presents only a scene of rocks, heaths, and shrubs, that speak the wretchedness of the soil, these simple people have their feasts, and their pleasures ; their faithful flock of goats attends them to these awful solitudes, and furnishes them with all the necessaries of life ; while their remote situation happily keeps them ignorant of greater luxury.

As these animals are apt to stray from the flock, no man can attend above fifty of them at a time. They are fattened in the same manner as sheep ; but taking
every

every precaution, their flesh is never so good or so sweet, in our climate, as that of mutton. It is otherwise between the tropics. The mutton there becomes flabby and lean, while the flesh of the goat rather seems to improve; and in some places the latter is cultivated in preference to the former. We therefore, find this animal in almost every part of the world, as it seems fitted for the necessities of man in both extremes. Towards the north, where the pasture is coarse and barren, the goat is fitted to find a scanty subsistence; between the tropics, where the heat is excessive, the goat is fitted to bear the climate, and its flesh is found to improve.

One of the most remarkable varieties we find in the goat is that of Natolia. The Natolian goat, or, as Mr. Buffon calls it, the goat of Angora, has the ears longer than ours, and broader in proportion. The male has horns of about the same length with the goat of Europe, but black, and turned very differently, going out horizontally on each side of the head, and twisted round in the manner of a cork-screw. The horns of the female are shorter, and encircle the ear somewhat like those of the ram. They are of a dazzling white colour, and in all the hair is very long, thick, fine, and

and glossy ; which, indeed, is the case with almost all the animals of Syria. There are a great number of animals about Angora, where the inhabitants drive trade with their hair, which is sold either raw, or manufactured into all parts of Europe. Nothing can exceed the beauty of the stuffs which are made from the hair of almost all the animals of that country. These are well known among us by the name of camlet.

A second variety is the Assyrian goat of Gefner, which is somewhat larger than ours, with ears almost hanging down to the ground, and broad in proportion. The horns, on the contrary, are not above two inches and an half long, black, and bending a little backwards. The hair is of a fox colour, and under the throat there are two excrescences, like the gills of a cock. These animals are chiefly kept round Aleppo, for the sake of their milk. They are driven through the streets, and their milk is sold to the inhabitants as they pass along.

In the third variety may be reckoned, the little goat of America, which is of the size of a kid, but the hair is as long as that of the ordinary breed. The horns, which do not exceed the length of a man's finger, are thick, and bend downwards so close to the head, that they almost enter the skin.

There

There is an animal of this kind at the Cape of Good Hope, called the blue goat, which may be ranked as the fourth variety. It is in shape like the domestic, but much larger, being nearly of the size of a stag. Its hair is very short, and of a delightful blue; but it loses a great deal of its beauty when the animal is dead. It has a very long beard; but the horns are not so long in proportion as in other goats, being turned spirally in the manner of a cork-screw. It has very long legs, but well proportioned; and the flesh is very well tasted, but lean. For this reason, in that plentiful country, it is chiefly killed upon account of its skin. It is a very shy animal, and seldom comes near the Dutch settlements; but they are found in great abundance in the more uncultivated parts of the country. Besides these, they are found in this extensive region of various colours, and many of them are spotted beautifully with red, white, and brown.

In fine, the Juda goat resembles ours in most parts, except in size, it being much smaller. This animal is common in Guinea, Angola, and all along the coasts of Africa: it is not much larger than a hare, but is extremely fat, and its flesh admirably tasted. It is in that country universally preferred to mutton.

These

These animals seem all of one kind, with very trifling distinctions between them. It is true that they differ in some respects; such as having neither the same colour, hair, ears, or horns. But it ought to be considered as a rule in natural history, that neither the horns, the colour, the fineness or the length of the hair, or the position of the ears, are to be considered as making an actual distinction in the kinds. These are accidental varieties, produced by climate and food, which are known to change even in the same animal, and give it a seeming difference of form. When we see the shapes, the inclinations, and the internal conformation of seemingly different creatures nearly the same; and, above all, when we see them producing among each other, we then have no hesitation in pronouncing the species, and asserting that these are of the goat kind, with which they are so materially connected.

But although these are evidently known to belong to the goat kind, there are others nearly resembling the goat, of whose kindred we cannot be equally certain. These are such as, being found in a state of nature, have not as yet been sufficiently subjected to human observation. Hence it is impossible to determine with precision to which class they belong; whether

ther they be animals of a particular kind, or merely the goat in its state of savage freedom. Were there but one of these wild animals, the enquiry would soon be ended; and we might readily allow it for the parent stock; but, in the present case, there are two kinds that have almost equal pretensions to this honour; and the claims of which it has been found difficult to determine. The animals in question are the shammoy and the ibex. These both bear very near approaches to the goat in figure; have horns that never shed; and, at the same time, are more different from each other than from the animal in question. From which of these two sources our domestic goat is derived is not easy to settle. Instead, therefore, of entering into the discussion, I will content myself with the result of Mr. Buffon's enquiries. He is of opinion that the ibex is the principal source, that our domestic goat is the immediate descendant, and that the shammoy is but a variety from that stock, a sort of collateral branch of the same family. His principal reason for giving the preference to the ibex is its having a more masculine figure, large horns, and a large beard; whereas the shammoy wants these marks of primitive strength and wildness. He supposes, therefore, in their original sa-
vage

vage state, that our goat has taken after the male of the parent stock, and the shammoy after the female; and that this has produced a variety in these animals, even before they underwent human cultivation.

However this be, the two animals in question seem both well fitted for their precarious life, being extremely swift, and capable of running with ease along the edges of precipices, where even the wolf or the fox, though instigated by hunger, dares not pursue them. They are both natives of the Alps, the Pyrenees, and the mountains of Greece; there they propagate in vast numbers, and continue to exist in spite of the hunter and every beast of prey that is found incessantly to pursue them.

The ibex resembles the goat in the shape of its body; but differs in the horns, which are much larger. They are bent backward, full of knots; and it is generally asserted that there is a knot added every year. There are some of these found, if we may believe Bellonius, at least two yards long. The ibex has a large black beard, is of a brown colour, with a thick warm coat of hair. There is a streak of black runs along the top of the back; and the belly and back of the thighs are of a fawn colour.

The shammoy*, though a wild animal, is very easily tamed, and docile; and to be

* M. Peroud's Account, as quoted by Buffon.

SHEEP AND GOAT KIND. 63

found only in rocky and mountainous places. It is the size of a domestic goat, and resembles one in many respects. It is most agreeably lively, and active beyond expression. The shammoy's hair is short, like that of the doe; in spring it is of an ash colour, and in autumn a dun colour, inclining to black, and in winter of a blackish brown. This animal is found in great plenty in the mountains of Dauphiny, of Piedmont, Savoy, Switzerland, and Germany. They are peaceful, gentle creatures, and live in society with each other. They are found in flocks of from four to fourscore, and even an hundred, dispersed upon the crags of the mountains. The large males are seen feeding detached from the rest, except in the rutting time, when they approach the females, and drive away the young. The time of their coupling is from the beginning of October; to the end of November and they bring forth in April and March. The young keeps with the dam about five months, and sometimes longer, if the hunters and the wolves do not separate them. It is asserted that they live between twenty and thirty years. Their flesh is good to eat; and they are found to have ten or twelve pounds of suet, which far surpasses that of the goat in hardness and goodness. The shammoy has scarce any cry,

cry, as most animals are known to have; if it has any, it is a kind of feeble bleat, by which the parent calls its young. But in cases of danger, and when it is to warn the rest of the flock, it uses an hissing noise, which is heard at a great distance. For it is to be observed that this creature is extremely vigilant, and has an eye the quickest and most piercing in nature. Its smell also is not less distinguishing. When it sees its enemy distinctly, it stops for a moment; and then, if the person be near, in an instant after it flies off. In the same manner, by its smell, it can discover a man at half a league distance, and gives the earliest notice. Upon any alarm, therefore, or any apprehensions of danger, the shammoy begins his hissing note with such force, that the rocks and the forests re-echo to the sound. The first hiss continues as long as the time of one inspiration. In the beginning it is very sharp, and deeper towards the close. The animal having, after this first alarm, reposed a moment, again looks round, and perceiving the reality of its fears, continues to hiss by intervals, until it has spread the alarm to a very great distance. During this time, it seems in the most violent agitation; it strikes the ground with its fore-foot, and sometimes with

with both : it bounds from rock to rock ; it turns and looks round ; it runs to the edge of the precipice ; and, still perceiving the enemy, flies with all its speed. The hissing of the male is much louder and sharper than that of the female : it is performed through the nose ; and is properly no more than a very strong breath, driven violently through a small aperture. The shammoy feeds upon the best herbage, and chuses the most delicate part of the plants, the flower and the tender buds. It is no less delicate with regard to several aromatic herbs, which grow upon the side of the mountains. It drinks but very little while it feeds upon the succulent herbage, and chews the cud in the intervals of feeding. This animal is greatly admired for the beauty of its eyes, which are round and sparkling, and which mark the warmth of its constitution. Its head is furnished with two small horns, of about half a foot long, of a beautiful black, and rising from the forehead, almost betwixt the eyes. These, contrary to what they are found in other animals, instead of going backwards or sideways, jet out forward, and bend a little, at their extremities, backward, in a small circle, and end in a very sharp point. The ears are placed in a very elegant manner, near the horns ; and there are

two stripes of black on each side of the face, the rest being of a whitish yellow, which never changes. The horn of this animal is often used as the head of a cane. Those of the female are less, and not so much bent; and some farriers are seen to bleed cattle with them. These animals are so much incommoded by heat, that they are never found in summer, except in the caverns of rocks, amidst fragments of unmelted ice, under the shade of high and spreading trees, or of rough and hanging precipices, that face the north, and which keep off entirely the rays of the sun. They go to pasture both morning and evening, and seldom during the heat of the day. They run along the rocks with great ease and seeming indifference, and leap from one to another, so that no dogs are able to pursue them. There is nothing more extraordinary than to see them climbing and descending precipices, that to all other quadrupedes are inaccessible. They always mount or descend in an oblique direction; and throw themselves down a rock of thirty feet, and light with great security upon some excrescence, or fragment, on the side of the precipice, which is just large enough to place their feet upon; they strike the rock, however, in their descent, with their feet, three or four times,

to stop the velocity of their motion; and when they have got upon their base below, they at once seem fixed and secure. In fact, to see them jump in this manner, they seem rather to have wings than legs; some, indeed, pretend to say that they use their horns for climbing, but this wants confirmation. Certain it is that their legs alone are formed for this arduous employment, the hinder being rather longer than the former, and bending in such a manner that, when they descend upon them, they break the force of the fall. It is also asserted, that when they feed, one of them always stands as centinel; but how far this may be true is questionable. For certain, while they feed, there are some of them that keep continually gazing round the rest; but this is practised among all gregarious animals; so that when they see any danger, they warn the rest of the herd of its approach. During the rigours of winter, the shammoy sleeps in the thickest forests, and feeds upon the shrubs and the buds of the pine-tree. It sometimes turns up the snow with its foot to look for herbage; and, where it is green, makes a delicious repast. The more craggy and uneven the forest, the more this animal is pleased with the abode, which thus adds to its security. The hunting

the shammoy is very laborious and extremely difficult. The most usual way is to hide behind the clefts of the rocks and shoot them. This, however, must be done with great precaution; the sportsman must creep for a vast way upon his belly, in silence, and take also the advantage of the wind, which if it blow from him they would instantly perceive. When arrived at a proper distance, he then advances his piece, which is to be rifle barrell'd, and to carry one ball, and tries his fortune among them. Some also pursue this animal as they do the stag, by placing proper persons at all the passages of a glade, and then, sending in others to rouse the game. Dogs are quite useless in this chace, as they rather alarm than overtake. Nor is it without danger even to the men; for it often happens that when the animal finds itself overpressed, it drives at the hunter with its head, and often tumbles him down the neighbouring precipice. This animal cannot go upon ice when smooth; but if there be the least inequalities on its surface, it then bounds along in security, and quickly evades all pursuit.

The skin of the shammoy was once famous, when tanned, for its softness and warmth; at present, however, since the art of tanning has been brought to greater perfection,

fection, the leather called shammy is made also of those of the tame goat, the sheep, and the deer. Many medicinal virtues also were said to reside in the blood, fat, gall, and the concretion sometimes found in the stomach of this animal, called German bezoar. The fat, mixed with milk, was said to be good in ulcers of the lungs. The gall was said to be useful in strengthening the sight; the stone, which is generally about the size of a walnut and blackish, was formerly in great request for having the same virtues with oriental bezoar. However, in the present enlightened state of physic, all these medicines are quite out of repute; and, although we have the names of several medicines procurable from quadrupedes, yet, except the musk or hartshorn alone, I know of none in any degree of reputation. It is true, the fat, the urine, the beak, and even the dung, of various animals, may be found efficacious where better remedies are not to be had; but are far surpassed by many at present in use, whose operations we know, and whose virtues are confirmed by repeated experience.

Such are the quadrupedes that more peculiarly belong to the goat kind. Each of these, in all probability, can engender and breed with the other; and were the whole

race extinguished, except any two, these would be sufficient to replenish the world, and continue the kind. Nature, however, proceeds in her variations by slow and insensible degrees, and scarce draws a firm distinguished line between any two neighbouring races of animals whatsoever. Thus it is hard to discover where the sheep ends and the goat begins; and we shall find it still harder to fix precisely the boundaries between the goat kind and the deer. In all transitions from one kind to the other, there are to be found a middle race of animals, that seem to partake of the nature of both, and that can precisely be referred to neither. That race of quadrupedes, called the Gazelles, are of this kind; they are properly neither goat nor deer, and yet they have many of the marks of both; they make the shade between these two kinds, and fill up the chasm in nature.

T H E G A Z E L L E S.

THE Gazelles, of which there are several kinds, can, with propriety, be referred neither to the goat or the deer; and yet they partake of both natures. Like the goat, they have hollow horns that never fall, which is otherwise in the deer. They have a gall-bladder, which

which is found in the goat and not in the deer; and, like that animal, they feed rather upon shrubs than grassy pastures. On the other hand, they resemble the roe-buck in size and delicacy of form; they have deep pits under the eyes like that animal; they resemble the roe-buck in the colour and nature of their hair; they resemble him in the bunches upon their legs, which only differ in being upon the fore-legs in these, and on the hind legs in the other. They seem, therefore, to be of a middle nature between these two kinds; or, to speak with greater truth and precision, they form a distinct kind by themselves.

The distinguishing marks of this tribe of animals, by which they differ both from the goat and deer, are these: their horns are made differently, being annulated or ringed round, at the same time that there are longitudinal depressions running from the bottom to the point. They have bunches of hair upon their fore-legs; they have a streak of black, red, or brown, running along the lower parts of their sides, and three streaks of whitish hair in the internal side of the ear. These are characters that none of them are without; besides these, there are others which, in general, they are found to have, and which are more obvious to the beholder.

holder. Of all animals in the world, the gazelle has the most beautiful eye, extremely brilliant, and yet so meek that all the eastern poets compare the eyes of their mistresses to those of this animal. A gazelle-eyed beauty is considered as the highest compliment that a lover can pay; and, indeed, the Greeks themselves thought it no inelegant piece of flattery to resemble the eyes of a beautiful woman to those of a cow. The gazelle, for the most part, is more delicately and finely limbed than even the roe-buck; its hair is as short, but finer and more glossy. Its hinder legs are longer than those before, as in the hare, which gives it greater security in ascending or descending steep places. Their swiftness is equal, if not superior to that of the roe; but as the latter bounds forward, so these run along in an even uninterrupted course. Most of them are brown upon the back, white under the belly, with a black stripe, separating these colours between. Their tail is of various lengths, but in all covered with pretty long hair; and their ears are beautiful, well placed, and terminating in a point. They all have a cloven hoof, like the sheep; they all have permanent horns; and the female has them smaller than the male.

Of

Of these animals, Mr. Buffon makes twelve varieties; which, however, are much fewer than what other naturalists have made them. The first is the Gazella, properly so called, which is of the size of the roebuck, and very much resembling it in all the proportions of its body, but entirely differing, as was said, in the nature and fashion of the horns, which are black and hollow, like those of the ram, or the goat, and never fall. The second he calls the Kevel, which is rather less than the former; its eyes also seem larger; and its horns, instead of being round, are flattened on the sides, as well in the male as the female. The third he calls the Corin, which very much resembles the two former, but that it is still less than either. Its horns also are smaller in proportion, smoother than those of the other two, and the annular prominences belonging to the kind are scarce discernable, and may rather be called wrinkles than prominences. Some of these animals are often seen streaked like the tiger. These three are supposed to be of the same species. The fourth he calls the Zeiran, the horns only of which he has seen; which, from their size, and the description of travellers, he supposes to belong to a larger kind of the gazelle, found in India and Persia, under that denomination.

The fifth he calls the Koba, and the sixth the Kob; these two differ from each other only in size, the former being much larger than the latter. The muzzle of these animals is much longer than those of the ordinary gazelle; the head is differently shaped, and they have no depressions under the eyes. The seventh he calls after its Egyptian name, the Algazel; which is shaped pretty much like the ordinary gazelle, except that the horns are much longer, being generally three feet from the point to the insertion, whereas, in the common gazelle, they are not above a foot; they are smaller also, and straighter, till near the extremities, when they turn short, with a very short flexure: they are black and smooth, and the annular prominences are scarcely observable. The eighth is called the Pazan; or, by some, the bezoar goat, which greatly resembles the former, except a small variety in their horns; and also with this difference, that as the algazel feed upon the plains, this is only found in the mountains. They are both inhabitants of the same countries and climate; being found in Egypt, Arabia, and Persia. This last is the animal famous for that concretion in the intestines or stomach, called the Oriental Bezoar, which was once in such repute all over the world for its medicinal virtues.

virtues. The word bezoar is supposed to take its name either from the pazan or pazar, which is the animal that produces it; or from a word in the Arabic language, which signifies antidote, or counter-poison. It is a stone of a glazed blackish colour, found in the stomach, or the intestines of some animal, and brought over to us from the East-Indies. Like all other animal concretions, it is found to have a kind of nucleus, or hard substance within, upon which the external coatings were formed; for, upon being sawed through, it is seen to have layer over layer, as in an onion. This nucleus is of various kinds; sometimes the buds of a shrub, sometimes a piece of stone, and sometimes a marcasite. This stone is from the size of an acorn to that of a pigeon's egg; the larger the stone, the more valuable it is held; its price encreasing, like that of a diamond. There was a time when a stone of four ounces sold in Europe for above two hundred pounds; but, at present, the price is greatly fallen, and they are held in very little esteem. The bezoar is of various colours; sometimes of a blood colour, sometimes of a pale yellow, and of all the shades between these two. It is generally glossy, smooth, and has a fragrant smell, like that of ambergrace, probably arising from the
aromatic

aromatic vegetables upon which the animal that produces it, feed. It has been given in vertigoes, epilepsies, palpitations of the heart, cholic, jaundice, and, in those places where the dearness, and not the value of medicines, is consulted, in almost every disorder incident to man. In all, perhaps, it is equally efficacious, acting only as an absorbent powder, and possessing virtues equal to common chalk, or crabs' claws. Judicious physicians have therefore discarded it; and this celebrated medicine is now chiefly consumed in countries where the knowledge of nature has been but little advanced. When this medicine was in its highest reputation, many arts were used to adulterate it; and many countries endeavoured to find out a bezoar of their own. Thus we had occidental bezoar, brought from America; German bezoar, which has been mentioned before; cow bezoar, and monkey bezoar. In fact, there is scarce an animal, except of the carnivorous kinds, that does not produce some of these concretions in the stomach, intestines, kidneys, bladder, and even in the heart. To these ignorance may impute virtues that they do not possess; experience has found but few cures wrought by their efficacy: but it is well known, that they often prove fatal to the animal that bears them.

them. These concretions are generally found in cows, by their practice of licking off their hair, which gathers in the stomach into the shape of a ball; acquires a surprizing degree of hardness, and sometimes a polish like leather. They are often as large as a goose-egg; and, when become too large to pass, block up the passage of the food, and the animal dies. The substance of these balls, however, is different from the bezoar mentioned above; being rather a concretion of hair than of stone. There is a bezoar found in the gall bladder of a boar, and thence called hog bezoar, in very great esteem; but perhaps with as little justice as any of the former. In short, there is scarce an animal or scarce a part of their bodies, in which concretions are not formed; and it is more than probable, as Mr Buffon justly remarks, that the bezoar so much in use formerly, was not the production of the pazar, or any one animal only, but that of the whole gazelle kind; who feeding upon odoriferous herbs and plants, gave this admirable fragrance to the accidental concretions which they were found to produce. As this medicine, however, is but little used at present, our curiosity is much abated, as to the cause of its formation. To return, therefore, to the varieties in the gazelle tribe, the
ninth

ninth is called the Ranguer, and is a native of Senegal. This differs somewhat in shape and colour from the rest; but particularly in the shape of its horns, which are strait to near the points, where they crook forward, nearly in the same manner as in the sham-moy they crook backward. The tenth variety of the gazelle is the Antelope, so well known to the English, who have given it the name. This animal is of the size of a roe-buck, and resembles the gazelle in many particulars, but differs in others: it has deeper eye-pits the horns are formed differently also, being about sixteen inches long, almost touching each other at the bottom, and spreading as they rise, so as at their tips to be sixteen inches asunder. They have the annular prominences of their kind, but not so distinguishable as in the gazelle: however, they have a double flexure, which is very remarkable, and serves to distinguish them from all others of their kind. At the root they have a tuft of hair, which is longer than that of any part of the body. Like others of the same kind, the antelope is brown on the back, and white under the belly; but these colours are not separated by the black streak which is to be found in all the rest of the gazelle kinds. There are different sorts of this animal, some with

with larger horns than others, and others with less. The one which makes the eleventh variety in the gazelle kind, Mr. Buffon calls the *Lidme*, which has very large horns ; and the other, which is the twelfth and last, he calls the *Indian Antelope*, the horns of which are very small.

To these may be added three or four varieties more, which it is not easy to tell whether to refer to the goat or the gazelle, as they equally resemble both. The first of these is the *Bubalus*, an animal that seems to partake of the mixed natures of the cow, the goat, and the deer. It resembles the stag in the size and the figure of its body, and particularly in the shape of its legs. But it has permanent horns, like the goat ; and made entirely like those of the gazelle kind. It also resembles that animal in its way of living : however, it differs in the make of its head, being exactly like the cow in the length of its muzzle, and in the disposition of the bones of its skull ; from which similitude it has taken its name. This animal has a narrow long head ; the eyes are placed very high ; the forehead short and narrow ; the horns permanent, about a foot long, black, thick, annulated, and the rings of the gazelle kind, remarkably large ; its shoulders are very high, and
it

it has a kind of bunch on them, that terminates at the neck; the tail is about a foot long, and tufted with hair at the extremity. The hair of this animal is remarkable in being thicker at the middle than at the root: in all other quadrupedes, except the elk and this, the hair tapers off from the bottom to the point; but in these, each hair seems to swell in the middle, like a nine-pin. The bubalus also resembles the elk in size, and the colour of its skin; but these are the only similitudes between them: as the one has a very large branching head of solid horns that are annually deciduous, the other has black unbranching hollow horns that never fall. The bubalus is common enough in Barbary, and has often been called by the name of the Barbary Cow, from which animal it differs so widely. It partakes pretty much of the nature of the antelope; like that having the hair short, the hide black, the ears pointed, and the flesh good for food.

The second anomalous animal of the goat-kind, Mr. Buffon calls the Condoma. It is supposed to be equal in size to the largest stag, but with hollow horns, like those of the goat kind, and with varied flexures, like those of the antelope. They are above three feet long; and, at their extremities, about
two

two feet afunder. All along the back there runs a white lift, which ends at the infertion of the tail; another of the fame colour croffes this, at the bottom of the neck, which it entirely furrounds: there are two more of the fame kind running round the body, one behind the fore legs, and the other running parallel to it before the hinder. The colour of the reft of the body is greyish, except the belly, which is white: it has a long grey beard; and its legs, though long, are well proportioned.

The third that may be mentioned, he calls the Guiba. It refembles the gazelles in every particular, except in the colour of the belly, which, as we have feen, is white in them, but in this is of a deep brown. Its horns alfo are not marked with annular prominences, but are fmooth and polished. It is alfo remarkable for white lifts, on a brown ground, that are difpofed along the animal's body, as if it were covered with a harness. Like the former, it is a native of Africa.

The African Wild Goat of Grimmer is the fourth. It is of a dark afh colour; and in the middle of the head is an hairy tuft, ftanding upright; on both fides, between the eyes and the nofe, there are very deep cavities, greater than thofe of the other kinds, which contain a yellow oily liquor,

which coagulates into a black substance, that has a smell between musk and civet. This being taken away, the liquor again runs out, and coagulates, as before. These cavities have no communication with the eyes, and, consequently, this oozing substance can have nothing of the nature of tears.

To this we may add the Chevrotin, or little Guinea Deer, which is the least of all cloven-footed quadrupedes, and perhaps the most beautiful; its legs, at the smallest part, are not much thicker than the shank of a tobacco-pipe; it is about seven inches high, and about twelve from the point of the nose to the insertion of the tail. It is the most delicately shaped animal in the world, being completely formed like a stag in miniature; except that its horns, when it has any, are more of the gazelle kind, being hollow and annulated in the same manner. It has two canine teeth in the upper jaw; in which respect it differs from all other animals of the goat or deer kind, and thus makes a species entirely distinct by itself. This wonderful animal's colour is not less pleasing; the hair, which is short and glossy, being in some of a beautiful yellow, except on the neck and belly, which is white. They are natives of India, Guinea, and the warm climates between the tropics; and are found

SHEEP AND GOAT KIND. 83

found in great plenty. But though they are amazingly swift for their size, yet the Negroes often overtake them in the pursuit, and knock them down with their sticks. They may be easily tamed, and then they become familiar and pleasing; but they are of such delicate constitutions, that they can bear no climate but the hottest; and they always perish with the rigours of ours, when they are brought over. The male in Guinea has horns; the female is without any; as are all the kinds of this animal, to be found either in Java or Ceylon, where they chiefly abound.

Such is the list of the gazelles; all which pretty nearly resemble the deer in form, and delicacy of shape; but have the horns hollow, single and permanent, like those of the goat. They properly fill up, as has been already observed, the interval between those two kinds of animals; so that it is difficult to tell where the goat ends, and the deer may be said to begin. If we compare the gazelles with each other, we shall find very slight distinctions between them. The turn or the magnitude of the horns, the different spots on the skin, or a difference of size in each, are chiefly the marks by which their varieties are to be known; but their

way of living, their nature, and their peculiar swiftness, all come under one description.

The gazelles are, in general, inhabitants of the warmer climates; and contribute, among other embellishments, to add beauty to those forests that are for ever green. They are often seen feeding in herds, on the sides of the mountain, or in the shades of the woods; and fly all together, upon the smallest approaches of danger. They bound with such swiftness, and are so very shy, that dogs or men vainly attempt to pursue them. They traverse those precipices with ease and safety, which to every quadrupede else are quite impracticable; nor can any animals, but of the winged kind, overtake them. Accordingly, in all those countries where they are chiefly found, they are pursued by falcons; and this admirable manner of hunting makes one of the principal amusements of the upper ranks of people all over the east.

The Arabians, Persians, and Turks, breed up for this purpose, that kind of a hawk called the Falcon Gentle, with which, when properly trained, they go forth on horseback among the forests and the mountains, the falcon perching upon the hand of the hunter. Their expedition is conducted with profound

found silence ; their dogs are taught to hang behind ; while the men, on the fleetest courfers, look round for the game. Whenever they spy a gazelle at the proper distance, they point the falcon to its object, and encourage it to pursue. The falcon, with the swiftness of an arrow, flies to the animal ; that, knowing its danger, endeavours, but too late, to escape. The falcon soon coming up with its prey, fixes its talons, one into the animal's cheek, the other into its throat, and deeply wounds it. On the other hand, the gazelle attempts to escape, but is generally wounded too deeply to run far. The falcon clings with the utmost perseverance, nor ever leaves its prey till it falls ; upon which the hunters from behind approaching, take up both, and reward the falcon with the blood of the spoil. They also teach the young ones, by applying them to the dead animal's throat, and accustoming them sometimes to fix upon that particular part ; for if it should happen that the falcon fixed upon any other part of the gazelle, either its back or its haunches, the animal would easily escape among the mountains, and the hunter would also lose his falcon.

They sometimes also hunt these animals with the ounce. This carnivorous and fierce creature being made tame and domestic, generally

nerally sits on horseback behind the hunter, and remains there with the utmost composure, untill the gazelle is shewn; it is then that it exerts all its arts and fierceness; it does not at once fly at its prey, but approaches slyly, turning and winding about until it comes within the proper distance, when all at once it bounds upon the heedless animal, and instantly kills it, and sucks its blood. If, on the other hand, it misses its aim, it rests in the place, without attempting to pursue any farther, but seems ashamed of its own inability.

There is still another way of taking the gazelle, which seems not so certain, nor so amusing as either of the former. A tame gazelle is bred up for this purpose, who is taught to join those of its kind, wherever it perceives them. When the hunter therefore, perceives a herd of these together, he fixes a noose round the horns of the tame gazelle, in such a manner, that if the rest but touch it, they are entangled; and thus prepared he sends his gazelle among the rest. The tame animal no sooner approaches, but the males of the herd instantly fall forth to oppose him; and, in butting with their horns are caught in the noose. In this, both struggling for some time, fall together to the ground; and, at last, the hunter
coming

coming up, disengages the one, and kills the other. Upon the whole, however, these animals, whatever be the arts used to pursue them, are very difficult to be taken. As they are continually subject to alarms from carnivorous beasts, or from man, they keep chiefly in the most solitary and inaccessible places, and find their only protection from situations of the greatest danger.

C H A P. IV.

Of the Musk Animal.

THE more we search into nature, the more we shall find how little she is known ; and we shall more than once have occasion to find, that protracted enquiry is more apt to teach us modesty, than to produce information. Although the number and nature of quadrupedes at first glance seems very little known ; yet, when we come to examine clofer, we find some with which we are very partially acquainted, and others that are utterly unknown. There is scarce a cabinet of the curious but what has the spoils of animals, or the horns or the hoofs of quadrupedes, which do not come within former descriptions. There is scarce a person whose trade is to dress or improve furs, but knows several creatures by their skins, which no naturalist has hitherto had notice of. But of all quadrupedes, there is none so justly the reproach of natural historians, as that which bears the musk. This perfume, so well known to the elegant, and so very useful in the hands of the physician, a medicine that has for more than a century been imported from the east in great quantities, and during all that time has
been

been improving in its reputation, is, nevertheless, so very little understood, that it remains a doubt whether the animal that produces it be an hog, an ox, a goat, or a deer. When an animal with which we are so nearly connected, is so utterly unknown, how little must we know of many that are more remote and unserviceable! Yet naturalists proceed in the same train, enlarging their catalogues and their names, without endeavouring to find out the nature, and fix the precise history of those with which we are very partially acquainted. It is the spirit of the scholars of the present age, to be fonder of encreasing the bulk of our knowledge than its utility; of extending their conquests than of improving their empire.

The musk which comes to Europe is brought over in small bags, about the size of a pigeon's egg, which, when cut open, appear to contain a kind of dusky reddish substance, like coagulated blood, and which, in large quantities, has a very strong smell; but when mixed and diffused, becomes a very agreeable perfume. Indeed, no substance now known in the world has a stronger or a more permanent smell. A grain of musk perfumes a whole room; and its odour continues for some days, without diminution. But in a larger quantity it continues
for

for years together ; and seems scarce wasted in its weight, although it has filled the atmosphere to a great distance with its parts. It is particularly used in medicine, in nervous and hyſteric diſorders ; and is found, in ſuch caſes, to be the moſt powerful remedy now in uſe : however, the animal that furniſhes this admirable medicine, has been very variously deſcribed, and is known but very imperfectly.

The deſcription given of this animal by Grew, is as follows. The muſk animal is properly neither of the goat nor deer kind, for it has no horns, and it is uncertain whether it ruminates or not ; however, it wants the fore teeth in the upper jaw, in the ſame manner as in ruminating animals ; but, at the ſame time, it has tuſks like thoſe of a hog. It is three feet ſix inches in length, from the head to the tail ; and the head is above half a foot long. The fore part of the head is like that of a grey-hound ; and the ears are three inches long, and erect, like thoſe of a rabbit ; but the tail is not above two inches. It is cloven footed, like beaſts of the goat kind ; the hair on the head and legs is half an inch long, on the belly an inch and an half, and on the back and buttocks three inches, and proportionably thicker than in any other animal. It is brown and white alternately,



De Sevedel

Jr. Lodge sculp.

The Musk.

alternately, from the root to the point; on the head and thighs it is brown, but under the belly and tail white, and a little curled, especially on the back and belly. On each side of the lower jaw, under the corners of the mouth, there is a tuft of thick hair, which is short and hard, and about three quarters of an inch long. The hair, in general, of this animal, is remarkable for its softness and fine texture; but what distinguishes it particularly are the tusks, which are an inch and an half long, and turn back in the form of an hook; and more particularly the bag which contains the musk, which is three inches long, two broad, and stands out from the belly an inch and an half. It is a very fearful animal, and, therefore, it has long ears; and the sense of hearing is so quick, that it can discover an enemy at a great distance.

After so long and circumstantial a description of this animal, its nature is but very little known; nor has any anatomist as yet examined its internal structure; or been able to inform us whether it be a ruminant animal, or one of the hog kind; how the musk is formed, or whether those bags in which it comes to us be really belonging to the animal, or are only the sophistications of the venders. Indeed, when we consider the

the immense quantities of this substance which are consumed in Europe alone, not to mention the east, where it is in still greater repute than here, we can hardly suppose that any one animal can furnish the supply ; and particularly when it must be killed before the bag can be obtained. We are told, it is true, that the musk is often deposited by the animal upon trees and stones, against which it rubs itself when the quantity becomes uneasy ; but it is not in that form which we receive it, but always in what seems to be its own natural bladder. Of these, Taverner brought home near two thousand in one year ; and as the animal is wild, so many must, during that space, have been hunted and taken. But as the creature is represented very shy, and as it is found but in some particular provinces of the east, the wonder is how its bag should be so cheap, and furnished in such great plenty. The bag in common does not cost (if I do not forget) above a crown by retail, and yet this is supposed the only one belonging to the animal ; and for the obtaining of which, it must have been hunted and killed. The only way of solving this difficulty, is to suppose that these bags are, in a great measure, counterfeit, taken from some other animal, or from some part of the same, filled with
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its blood, and a very little of the perfume, but enough to impregnate the rest with a strong and permanent odour. It comes to us from different parts of the east; from China, Tonquin, Bengal, and often from Muscovy: that of Thibet is reckoned the best, and sells for fourteen shillings an ounce; that of Muscovy the worst, and sells but for three; the odour of this, though very strong at first, being quickly found to evaporate.

Musk was some years ago in the highest request as a perfume, and but little regarded as a medicine; but at present its reputation is totally changed; and having been found of great benefit in physic, it is but little regarded for the purposes of elegance. It is thus that things which become necessary, cease to continue pleasing; and the consciousness of their use, destroys their power of administering delight.

C H A P. V.

Animals of the Deer Kind.

IF we compare the stag and the bull as to the shape and form, no two animals can be more unlike; and yet, if we examine their internal structure, we shall find a striking similitude between them. Indeed their differences, except to a nice observer, will scarcely be perceivable. All of the deer kind want the gall-bladder; their kidneys are formed differently; their spleen is also proportionably larger; their tail is shorter; and their horns, which are solid, are renewed every year. Such are the slight internal discriminations between two animals one of which is among the swiftest, and the other the heaviest of the brute creation.

The Stag is one of those innocent and peaceable animals that seems made to embellish the forest, and animate the solitudes of nature. The easy elegance of his form, the lightness of his motions, those large branches that seem made rather for the ornament of his head than its defence, the size, the strength and the swiftness of this beautiful creature, all sufficiently rank him among the first of the quadrupedes, among the most noted objects of human curiosity.

The

The Stag, or Hart, whose female is called a *hind*, and the young a *calf*, differs in size and in horns from a fallow deer. He is much larger, and his horns are round; whereas in the fallow kind they are broad and palmated. By these the animal's age is known. The first year, the stag has no horns, but an horny excrescence, which is short, rough, and covered with a thin hairy skin. The next year the horns are single and straight; the third year they have two antlers, three the fourth, four the fifth, and five the sixth; this number is not always certain, for sometimes there are more, and often less. When arrived at the sixth year, the antlers do not always encrease; and, although the number may amount to six or seven on each side, yet the animal's age is then estimated rather from the size of the antlers and the thickness of the branch which sustains them, than from their variety.

These horns, large as they seem, are, notwithstanding, shed every year, and new ones come in their place. The old horns are of a firm solid texture, and usually employed in making handles for knives and other domestic utensils. But, while young nothing can be more soft or tender; and the animal, as if conscious of his own imbecility, at those times, instantly upon shedding his

his former horns, retires from the rest of his fellows, and hiding himself in solitudes and thickets, never ventures out to pasture, except by night. During this time, which most usually happens in the spring, the new horns are very painful, and have a quick sensibility of any external impression. The flies are also extremely troublesome to him. When the old horn is fallen off, the new does not begin immediately to appear; but the bones of the skull are seen covered only with a transparent periosteum, or skin, which, as anatomists teach us, covers the bones of all animals. After a short time, however, this skin begins to swell, and to form a soft tumour, which contains a great deal of blood, and which begins to be covered with a downy substance that has the feel of velvet, and appears nearly of the same colour with the rest of the animal's hair. This tumour every day buds forward from the point like the graft of a tree; and, rising by degrees from the head, shoots out the antlers on either side, so that in a few days, in proportion as the animal is in condition, the whole head is completed. However, as was said above, in the beginning, its consistence is very soft, and has a sort of bark, which is no more than a continuation of the integument of the skull,

skull. It is velvety and downy, and every where furnished with blood-vessels, that supply the growing horns with nourishment. As they creep along the side of the branches, the print is marked over the whole surface; and the larger the blood-vessels, the deeper these marks are found to be; from hence arises the inequality of the surface of the deer's horns; which, as we see, are furrowed all along the sides, the impressions diminishing towards the point, where the substance is as smooth and as solid as ivory. But it ought to be observed, that this substance, of which the horns are composed, begins to harden at the bottom, while the upper part remains soft and still continues growing; from whence it appears that the horns grow differently in deer from those of sheep or cows; in which they are always seen to encrease from the bottom. However, when the whole head has received its full growth, the extremities then begin to acquire their solidity; the velvet covering, or bark, with its blood-vessels, dry up, and then begin to fall; and this the animal hastens, by rubbing its antlers against every tree it meets. In this manner, the whole external surface being stripped off by degrees, at length the whole head acquires its complete hardness, expansion, and beauty.

It would be a vain task to enquire into the cause of the animal production of these horns; it is sufficient to observe, that if a stag is castrated when its horns are fallen off, they will never grow again; and, on the contrary, if the same operation is performed when they are on, they will never fall off. If only one of his testicles are taken out, he will want the horn on that side; if one of the testicles only be tied up, he will want the horn of the opposite side. The encrease of their provision also tends to facilitate the growth and the expansion of the horns; and Mr. Buffon thinks it possible to retard their growth entirely by greatly retrenching their food*. As a proof of this, nothing can be more obvious than the difference between a stag bred in fertile pastures and undisturbed by the hunter, and one often pursued and ill nourished. The former has his head expanded, his antlers numerous, and the branches thick; the latter has but few antlers, the traces of the blood-vessels upon them are but slight, and the expansion but little. The beauty and size of their horns, therefore, mark their strength and their vigour; such of them as are sickly, or have been wounded, never shooting out that magnificent profusion so much ad-

* Buffon, vol. xi. p. 113.

mired in this animal. Thus the horns may in every respect, be resembled to a vegetable substance, grafted upon the head of an animal. Like a vegetable they grow from the extremities; like a vegetable they are for a while covered with a bark that nourishes them; like a vegetable they have their annual production and decay; and a strong imagination might suppose that the leafy productions on which the animal feeds, go once more to vegetate in his horns*.

The stag is usually a twelvemonth old before the horns begin to appear, and then a single branch is all that is seen for the year ensuing. About the beginning of spring, all of this kind are seen to shed their horns, which fall off of themselves; though sometimes the animal assists the efforts of nature by rubbing them against a tree. It seldom happens that the branches on both sides fall off at the same time, there often being two or three days between the dropping of the one and the other. The old stags usually shed their horns first; which generally happens towards the latter end of February, or the beginning of March. Those of the second head, namely, such as are between five and

* M. Buffon has supposed something like this. Vid. Passim.

six years old) shed their horns about the middle or latter end of March; those still younger, in the month of April; and the youngest of all, not till the middle, or the latter end of May; they generally shed them in pools of water, whither they retire from the heat; and this has given rise to the opinion of their always hiding their horns. These rules, though true in general, are yet subject to many variations; and universally it is known that a severe winter retards the shedding of the horns.

The horns of the stag generally encrease in thickness and in height from the second year of its age to the eighth. In this state of perfection they continue during the vigour of life; but as the animal grows old the horns feel the impressions of age, and shrink like the rest of the body. No branch bears more than twenty or twenty-two antlers even in the highest state of vigour; and the number is subject to great variety; for it happens that the stag at one year has either less or more than the year preceding, in proportion to the goodness of his pasture, or the continuance of his security, as these animals seldom thrive when often roused by the hunters. The horns are also found to partake of the nature of the soil; in the more fertile pastures they are large and tender; on the contrary,

trary, in the barren soil they are hard, stunted, and brittle.

As soon as the stags have shed their horns, they separate from each other, and seek the plainer parts of the country, remote from every other animal, which they are utterly unable to oppose. They then walk with their heads stooping down, to keep their horns from striking against the branches of the trees above. In this state of imbecility they continue near three months before their heads have acquired their full growth and solidity; and then, by rubbing them against the branches of every thicket, they at length clear them of the skin which had contributed to their growth and nourishment. It is said by some that the horn takes the colour of the sap of the tree against which it is rubbed; and that some thus become red, when rubbed against the heath; and others brown, by rubbing against the oak; this, however, is a mistake, since stags kept in parks where there are no trees, have a variety in the colour of their horns, which can be ascribed to nothing but nature.

A short time after they have furnished their horns, they begin to feel the impressions of the rut, or the desire of copulation. The old ones are the most forward; and about the end of August, or the beginning

ning of September, they quit their thickets, and return to the mountain in order to seek the hind to whom they call with a loud tremulous note. At this time their neck is swollen ; they appear bold and furious ; fly from country to country ; strike with their horns against the trees and obstacles, and continue restless and fierce until they have found the female ; who at first flies from them, but is at last compelled and overtaken. When two stags contend for the same female, how timorous soever they may appear at other times, they then seem agitated with an uncommon degree of ardour. They paw up the earth, menace each other with their horns, bellow with all their force, and striking in a desperate manner against each other, seem determined upon death or victory. This combat continues till one of them is defeated or flies ; and it often happens that the victor is obliged to fight several of those battles before it remains undisputed master of the field. The old ones are generally the conquerors upon these occasions, as they have more strength and greater courage ; and these also are preferred by the hind itself to the young ones, as the latter are more feeble, and less ardent. However they are all equally inconstant,

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keeping to the female but a few days, and then seeking out for another not to be enjoyed, perhaps, without a repetition of their former danger.

In this maner the stag continues to range from one to the other for about three weeks, the time the rut continues; during which he scarce eats, sleeps, or rests, but continues to pursue, to combat, and to enjoy. At the end of this period of madness, for such in this animal it seems to be, the creature that was before fat, sleek, and glossy, becomes lean, feeble, and timid. He then retires from the herd to seek plenty and repose; he frequents the side of the forest, and chuses the most nourishing pastures, remaining there till his strength is renewed. Thus is his whole life passed in the alternations of plenty and want, of corpulence and inanition, of health and sickness, without having his constitution much affected by the violence of the change. As he is above five years coming to perfection, he lives about forty years; and it is a general rule, that every animal lives about seven or eight times the number of years which it continues to grow. What, therefore, is reported concerning the life of this animal, has arisen from the credulity of ignorance: some say, that a stag having been
taken

taken in France, with a collar, on which were written these words, “Cæsar hoc me donavit;” this was interpreted of Julius Cæsar; but it is not considered that Cæsar is a general name for kings, and that one of the Emperors of Germany, who are always stiled Cæsars, might have ordered the inscription.

This animal may differ in the term of his life according to the goodness of pasture, or the undisturbed repose he happens to enjoy. These are advantages that influence not only his age, but his size and his vigour. The stags of the plains, the vallies, and the little hills, which abound in corn and pasture, are much more corpulent and much taller than such as are bred on the rocky waste, or the heathy mountain. The latter are low, small, and meagre, incapable of going so swift as the former, although they are found to hold out much longer. They are also more artful in evading the hunters; their horns are generally black and short, while those of the lowland stags are reddish and flourishing; so that the animal seems to encrease in beauty and stature in proportion to the goodness of the pasture, which he enjoys in security.

The usual colour of the stag in England is red; nevertheless, the greater number in
other

other countries are brown. There are some few that are white; but these seem to have obtained this colour in a former state of domestic tameness. Of all the animals that are natives of this climate, there are none that have such a beautiful eye as the stag: it is sparkling, soft, and sensible. His senses of smelling and hearing are in no less perfection. When he is in the least alarmed, he lifts the head and erects the ears, standing for a few minutes as if in a listening posture. Whenever he ventures upon some unknown ground, or quits his native covering, he first stops at the skirt of the plain to examine all around; he next turns against the wind to examine by the smell if there be any enemy approaching. If a person should happen to whistle or call out, at a distance, the stag is seen to stop short in his slow measured pace, and gaze upon the stranger with a kind of aukward admiration: if the cunning animal perceives neither dogs nor fire-arms preparing against him, he goes forward, quite unconcerned, and slowly proceeds without offering to fly. Man is not the enemy he is most afraid of; on the contrary, he seems to be delighted with the sound of the shepherd's pipe; and the hunters sometimes make use of that instrument to allure the poor animal to his destruction.

The

The stag eats slowly, and is very delicate in the choice of his pasture. When he has eaten a sufficiency, he then retires to the covert of some thicket to chew the cud in security. His rumination, however, seems performed with much greater difficulty than with the cow or sheep; for the grass is not returned from the first stomach without much straining, and a kind of hiccup, which is easily perceived during the whole time it continues. This may proceed from the greater length of his neck and the narrowness of the passage, all those of the cow and the sheep kind having it much wider.

This animal's voice is much stronger, louder, and more tremulous in proportion as he advances in age; in the time of rut it is even terrible. At that season he seems so transported with passion that nothing obstructs his fury; and, when at bay, he keeps the dogs off with great intrepidity. Some years ago, the Duke of Cumberland caused a tiger and a stag to be enclosed in the same area; and the stag made so bold a defence, that the tiger was at last obliged to fly. The stag seldom drinks in the winter, and still less in the spring, while the plants are tender and covered over with dew. It is in the heat of the summer, and during the time of rut that he is seen constantly frequenting
the

the side of rivers and lakes, as well to slake his thirst as to cool his ardour. He swims with great ease and strength, and best at those times when he is fattest, his fat keeping him buoyant, like oil upon the surface of the water. During the time of the rut he even ventures out to sea, and swims from one island to another, although there may be some leagues distance between them.

The cry of the hind, or female, is not so loud as that of the male, and is never excited but by apprehension for herself or her young. It need scarce be mentioned that she has no horns, or that she is more feeble and unfit for hunting than the male. When once they have conceived, they separate from the males, and then they both herd together apart. The time of gestation continues between eight and nine months, and they generally produce but one at a time. Their usual season for bringing forth is about the month of May, or the beginning of June, during which they take great care to hide their young in the most obscure thickets. Nor is this precaution without reason, since almost every creature is then a formidable enemy. The eagle, the falcon, the osprey, the wolf, the dog, and all the rapacious family of the cat kind, are in continual employment

ployment to find out her retreat. But, what is more unnatural still, the stag himself is a professed enemy, and she is obliged to use all her arts to conceal her young from him as from the most dangerous of her pursuers. At this season, therefore, the courage of the male seems transferred to the female; she defends her young against her less formidable opponents by force; and when pursued by the hunter, she even offers herself to mislead him from the principal object of her concern. She flies before the hounds for half the day, and then returns to her young, whose life she has thus preserved at the hazard of her own. The calf, for so the young of this animal is called, never quits the dam during the whole summer; and in winter, the hind, and all the males under a year old, keep together, and assemble in herds, which are more numerous in proportion as the season is more severe. In the spring they separate; the hinds to bring forth, while none but the year old remain together; however, these animals are in general fond of herding and grazing in company; it is danger or necessity alone that separates them.

The dangers they have to fear from other animals, are nothing when compared to those
from

from man. The men of every age and nation have made the chase of the stag one of their most favourite pursuits; and those who first hunted for necessity, have continued it for amusement. In our own country, in particular, hunting was ever esteemed as one of the principal diversions of the great*. At first, indeed, the beasts of chase had the whole island for their range, and knew no other limits than those of the ocean.

The Roman jurisprudence, which was formed on the manners of the first ages, established it as a law, that as the natural right of things which have no master belongs to the first possessor, wild beasts, birds, and fishes, are the property of whosoever could first take them. But the northern barbarians, who over-ran the Roman Empire, bringing with them the strongest relish for this amusement, and, being now possessed of more easy means of subsistence from the lands they had conquered, their chiefs and leaders began to appropriate the right of hunting, and, instead of a natural right, to make it a royal one. When the Saxon kings, therefore, had established themselves into an heptarchy, the chaces were reserved by each sovereign for his own particular amusement. Hunting and war, in those uncivilized ages,

* British Zoology.

were the only employment of the great. Their active, but uncultivated, minds were susceptible of no pleasure but those of a violent kind, such as gave exercise to their bodies, and prevented the uneasiness of thinking. But as the Saxon kings only appropriated those lands to the business of the chase which were unoccupied before, so no individuals received any injury. But it was otherwise when the Norman kings were settled upon the throne. The passion for hunting was carried to an excess, and every civil right was involved in general ruin. This ardour for hunting was stronger than the consideration of religion even in a superstitious age. The village communities, nay, even the most sacred edifices, were thrown down, and all turned into one vast waste, to make room for animals, the objects of a lawless tyrant's pleasure. Sanguinary laws were enacted to preserve the game; and, in the reigns of William Rufus and Henry the First, it was deemed less criminal to destroy one of the human species than a beast of chase. Thus it continued while the Norman line filled the throne; but when the Saxon line was restored, under Henry the Second, the rigour of the forest laws were softened. The barons also for a long time imitated the encroachments, as well as the amusements, of the monarch;

monarch ; but when property became more happily divided, by the introduction of arts and industry, these extensive hunting grounds became more limited ; and as tillage and husbandry encreased, the beasts of chace were obliged to give way to others more useful to the community. Those vast tracts of land before dedicated to hunting, were then contracted ; and, in proportion as the useful arts gained ground, they protected and encouraged the labours of the industrious, and repressed the licentiousness of the sportsman. It is, therefore, among the subjects of a despotic government only that these laws remain in full force, where large wastes lie uncultivated for the purposes of hunting, where the husbandman can find no protection from the invasions of his lord, or the continual depredations of those animals which he makes the objects of his pleasure.

In the present cultivated state of this country therefore, the stag is unknown in its wild natural state ; and such of them as remain among us are kept, under the name of red deer, in parks among the fallow deer. But they are become less common than formerly ; its excessive viciousness, during the rutting season, and the badness of its flesh, inducing most people to part with the species. The few that still remain wild
are

are to be found on the moors that border on Cornwall and Devonshire; and in Ireland, on most of the large mountains of that country.

In England, the hunting the stag and the buck are performed in the same manner; the animal is driven from some gentleman's park, and then hunted through the open country. But those who pursue the wild animal, have a much higher object, as well as a greater variety in the chase. To let loose a creature that was already in our possession, in order to catch it again, is, in my opinion, but a poor pursuit, as the reward when obtained is only what we before had given away. But to pursue an animal that owns no proprietor, and which he that first seizes may be said to possess, has something in it that seems at least more rational; this rewards the hunter for his toil, and seems to repay his industry. Besides, the superior strength and swiftness of the wild animal prolongs the amusement; it is possessed of more various arts to escape the hunter, and leads him to precipices where the danger ennobles the chase. In pursuing the animal let loose from a park, as it is but little versed in the stratagems of escape; the hunter follows as sure of overcoming, and feels none of those alternations of hope and
fear

fear which arise from the uncertainty of success. But it is otherwise with the mountain stag : having spent his whole life in a state of continual apprehension ; having frequently been followed, and as frequently escaped, he knows every trick to mislead, to confound, or intimidate his pursuers ; to stimulate their ardour, and enhance their success.

Those who hunt this animal have their peculiar terms for the different objects of their pursuit. The professors in every art take a pleasure in thus employing a language known only to themselves, and thus accumulate words which to the ignorant have the appearance of knowledge. In this manner, the stag is called the first year, a *calf* or *hind calf* ; the second year, a *knobber* ; the third, a *brock* ; the fourth, a *staggard* ; the fifth, a *stag* ; the sixth, an *hart*. The female is called an *hind* ; the first year she is a *calf* ; the second, a *bearse* ; the third, a *hind*. This animal is said to *harbour* in the place where he resides. When he cries he is said to *bell* ; the print of his hoof is called the *slot* ; his tail is called the *single* ; his excrement the *fewmet* ; his horns are called his *bead* ; when simple, the first year, they are called *broches* ; the third year, *spears* ; the fourth year, that part which bears the

antlers is called the *beam*, and the little impressions upon its surface *glitters*; that which rise from the crust of the *beam* are called *pearls*. The antlers also have distinct names, the first that branches off is called the *antler*; the second the *sur antler*; all the rest which grow afterwards, till you come to the top, which is called the *crown*, are called *royal antlers*. The little buds about the tops are called *croches*. The impression on the place where the stag has lain, is called the *layer*. If it be in covert or a thicket, it is called his *harbour*. Where a deer has passed into a thicket, leaving marks whereby his bulk may be guessed, it is called an *entry*. When they cast their heads, they are said to *mew*. When they rub their heads against trees, to bring off the peel of their horns, they are said to *fray*. When a stag hard hunted takes to swimming in the water, he is said to *go sail*; when he turns his head against the hounds, he is said to *bay*; and when the hounds pursue upon the scent, until they have unharboured the stag, they are said to *draw on the slot*.

Such are but a few of the many terms used by hunters in pursuing of the stag most of which are now laid aside, or in use only with game-keepers. The chase, however, is continued

tinued in many parts of the country where the red deer is still preserved, and still makes the amusement of such as have not found out more liberal entertainments. In those few places where the animal is perfectly wild, the amusement, as we said above, is still superior. The first great care of the hunter, when he leads out his hounds to the mountain side, where the deer are generally known to harbour, is to make choice of a proper stag to pursue. His ambition is to unharbour the largest and the boldest of the whole herd; and for this purpose he examines the track, if there be any, which if he find long and large, he concludes, that it must have belonged to a stag, and not an hind, the print of whose foot is rounder. Those marks also which he leaves on trees, by the rubbing of his horns, shew his size, and point him out as the proper object of pursuit. Now to seek out a stag in his haunt, it is to be observed, that he changes his manner of feeding every month. From the conclusion of rutting-time, which is November, he feeds in heaths and broomy places. In December they herd together, and withdraw into the strength of the forests, to shelter themselves from the severe weather, feeding on holm, elder trees, and brambles. The three following months they leave

I 2 herding,

herding, but keep four or five in a company, and venture out to the corners of the forest, where they feed on winter pasture, sometimes making their incursions into the neighbouring corn-fields, to feed upon the tender shoots, just as they peep above ground. In April and May they rest in thickets and shady places, and seldom venture forth, unless roused by approaching danger. In September and October their annual ardour returns; and then they leave the thickets, boldly facing every danger, without any certain place for food or harbour. When, by a knowledge of these circumstances, the hunter has found out the residence, and the quality of his game, his next care is to uncouple and cast off his hounds in the pursuit: these no sooner perceive the timorous animal that flies before them, but they all together open in full cry, pursuing rather by the scent than the view, encouraging each other to continue the chase, and tracing the flying animal with the most amazing sagacity. The hunters also are not less ardent in their speed on horseback, cheering up the dogs, and directing them where to pursue. On the other hand, the stag, when unharboured, flies at first with the swiftness of the wind, leaving his pursuers several miles in the rear; and at length

length having gained his former coverts, and no longer hearing the cries of the dogs and men that he had just left behind, he stops, gazes round him, and seems to recover his natural tranquillity. But this calm is of short duration, for his inveterate pursuers slowly and securely trace him along, and he once, more hears the approaching destruction from behind. He again, therefore, renews his efforts to escape, and again leaves the pursuers at almost the former distance; but this second effort makes him more feeble than before, and when they come up a second time, he is unable to outstrip them with equal velocity. The poor animal now, therefore, is obliged to have recourse to all his little arts of escape, which sometimes, though but seldom, avail him. In proportion as his strength fails him, the ardour of his pursuers is enflamed; he tracks more heavily on the ground, and this encreasing the strength of the scent, redoubles the cries of the hounds, and enforces their speed. It is then that the stag seeks for refuge among the herd, and tries every artifice to put off some other head for his own. Sometimes he will send forth some little deer in his stead, in the mean time lying close himself, that the hounds may overshoot him. He will break into one thicket after another to find deer, rousing them, gathering them together,

together, and endeavouring to put them upon the tracks he has made. His old companions, however, with a true spirit of ingratitude, now all forsake and shun him with the most watchful industry, leaving the unhappy creature to take his fate by himself. Thus abandoned of his fellows, he again tries other arts, by doubling and crossing in some hard beaten highway, where the scent is least perceivable. He now also runs against the wind, not only to cool himself, but the better to hear the voice, and judge of the distance of his implacable pursuers. It is now easily perceivable how sorely he is pressed, by his manner of running, which from the bounding easy pace with which he began, is converted into a stiff and short manner of going; his mouth also is black and dry, without foam on it; his tongue hangs out; and the tears, as some say, are seen starting from his eyes. His last refuge, when every other method of safety has failed him, is to take the water, and to attempt an escape by crossing whatever lake or river he happens to approach. While swimming, he takes all possible care to keep in the middle of the stream, lest, by touching the bough of a tree, or the herbage on the banks, he may give scent to the hounds. He is also ever found to swim against the

the stream; whence the huntsmen have made it into a kind of proverb, *That he that would his chace find, must up with the river and down with the wind.* On this occasion too he will often cover himself under water, so as to shew nothing but the tip of his nose. Every resource, and every art being at length exhausted, the poor creature tries the last remains of his strength, by boldly opposing those enemies he cannot escape; he therefore faces the dogs and men, threatens with his horns, guards himself on every side, and for some time stands at bay. In this manner, quite desperate, he furiously aims at the first dog or man that approaches; and it often happens that he does not die unrevenge. At that time, the more prudent, both of the dogs and men, seem willing to avoid him; but the whole pack quickly coming up, he is soon furrounded and brought down, and the huntsman winds a *treble mort*, as it is called, with his horn.

Such is the manner of pursuing this animal in England; but every country has a peculiar method of its own, adapted either to the nature of the climate, or the face of the soil. The ancient manner was very different from that practised at present; they used their dogs only to find out the game, but not to rouse it. Hence they were not
curious

curious as to the music of their hounds, or the composition of their pack ; the dog that opened before he had discovered his game, was held in no estimation. It was their usual manner silently to find out the animal's retreat, and surround it with nets and engines, then to drive him up with all their cries, and thus force him into the toils which they had previously prepared.

In succeeding times the fashion seemed to alter ; and particularly in Sicily, the manner of hunting was as follows*. The nobles and gentry being informed which way an herd of deer passed, gave notice to another, and appointed a day for hunting. For this purpose, every one was to bring a cross-bow or a long bow, and a bundle of staves, shod with iron, the heads bored, with a cord passing through them all. Thus provided they came to where the herd continued grazing, and casting themselves about in a large ring, surrounded the deer on every side. Then each taking his stand, unbound his faggot, set up his stake, and tied the end of the cord to that of his next neighbour, at the distance of about ten feet one from the other. Between each of these stakes was hung a bunch of crimson feathers, and so

* Pier. Hieroglyph. lib. vii. cap. vi.

disposed,

disposed, that with the least breath of wind they would whirl round, and preserve a sort of fluttering motion. This done, the persons who set up the staves withdrew, and hid themselves in the neighbouring coverts: then the chief huntsman, entering with his hounds within the lines, roused the game with a full cry. The deer, frightened, and flying on all sides, upon approaching the lines, were scared away by the fluttering of the feathers, and wandering about within this artificial paling, still awed by the shining and fluttering plumage that encircled their retreat: the huntsman, however, still pursuing, and calling every person by name, as he passed by their stand, commanded him to shoot the first, third, or sixth, as he pleased; and if any one missed, or singled out another than that assigned him, it was considered as a most shameful mischance. In this manner, however, the whole herd was destroyed; and the day concluded with mirth and feasting.

The stags of China are of a particular kind, for they are no taller than a common house-dog; and hunting them is one of the principal diversions of the great. Their flesh, while young, is exceedingly good; but when they arrive at maturity, it begins to grow hard and tough: however, the
tongue,

tongue, the muzzle, and the ears, are in particular esteem among that luxurious people. Their manner of taking them is singular enough: they carry with them the heads of some of the females stuffed, and learn exactly to imitate their cry; upon this the male does not fail to appear, and looking on all sides, perceives the head, which is all that the hunter, who is himself concealed, discovers. Upon their nearer approach, the whole company rise, surround, and often take him alive.

There are very few varieties in the red deer of this country; and they are mostly found of the same size and colour. But it is otherwise in different parts of the world, where they are seen to differ in form, in size, in horns, and in colour.

The stag of Corsica is a very small animal, being not above half the size of those common among us. His body is short and thick, his legs short, and his hair of a dark brown.

There is in the forests of Germany, a kind of stag, named by the ancients the *Tragelaphus*, and which the natives call the *Bran Deer*, or the *Brown deer*. This is of a darker colour than the common stag, of a lighter shade upon the belly, long hair upon the neck and throat, by which it appears bearded, like the goat.

There

There is also a very beautiful stag, which by some is said to be a native of Sardinia; but others (among whom is Mr. Buffon) are of opinion that it comes from Africa or the East Indies. He calls it the Axis, after Pliny; and considers it as making the shade between the stag and the fallow deer. The horns of the axis are round, like those of the stag; but the form of its body entirely resembles that of the buck, and the size also is exactly the same. The hair is of four colours; namely, fallow, white, black, and grey. The white is predominant under the belly, on the inside of the thighs, and the legs. Along the back there are two rows of spots in a right line; but those on other parts of the body are very irregular. A white line runs along each side of this animal, while the head and neck are grey. The tail is black above, and white beneath; and the hair upon it is six inches long.

Although there are but few individuals of the deer kind, yet the race seems diffused over all parts of the earth. The new continent of America, in which neither the sheep, the goat, nor the gazelle, have been originally bred, nevertheless produces stags, and other animals of the deer kind, in sufficient plenty. The Mexicans have a breed of white stags in their parks, which they call

Stags

Stags Royal *. The stags of Canada differ from ours in nothing except the size of the horns, which in them is greater; and the direction of the antlers, which rather turn back, than project forward, as in those of Europe. The same difference of size that obtains among our stags, is also to be seen in that country; and, as we are informed by Ruyfch, the Americans have brought them into the same state of domestic tameness that we have our sheep, goats, or black cattle. They send them forth in the day-time to feed in the forests; and at night they return home with the herdsman who guards them. The inhabitants have no other milk but what the hind produces; and use no other cheese but what is made from thence. In this manner we find, that an animal which seems made only for man's amusement, may be easily brought to supply his necessities. Nature has many stores of happiness and plenty in reserve, which only want the call of industry to be produced, and now remain as candidates for human approbation.

* Buffon, vol. xii. p. 35.

T H E F A L L O W D E E R.

N O two animals can be more nearly allied than the stag and fallow deer*. Alike in form, alike in disposition, in the superb furniture of their heads, in their swiftness and timidity; and yet no two animals keep more distinct, or avoid each other with more fixed animosity. They are never seen to herd in the same place, they never engender together, or form a mixed breed; and even in those countries where the stag is common, the buck seems to be entirely a stranger. In short, they both form distinct families; which though so seemingly near, are still remote; and although with the same habits, yet retain an unalterable aversion.

The fallow deer, as they are much smaller, so they seem of a nature less robust, and less savage than those of the stag kind. They are found but rarely wild in the forests; they are in general, bred up in parks, and kept for the purposes of hunting, or of luxury, their flesh being preferred to that of any other animal. It need scarce be mentioned, that the horns of the buck make its principal distinction, being broad and palmed; whereas those of the stag are in every

* Buffon, vol. xii. p. 36.

part round. In the one, they are flatted and spread like the palm of the hand; in the other they grow like a tree, every branch being of the shape of the stem that bears it. The fallow deer also has the tail longer, and the hair lighter than the stag; in other respects, they pretty nearly resemble one another.

The head of the buck, as of all other animals of this kind, is shed every year, and takes the usual time for repairing. The only difference between it and the stag is, that this change happens later in the buck; and its rutting-time, consequently, falls more into the winter. It is not found so furious at this season as the former; nor does it so much exhaust itself by the violence of its ardour. It does not quit its natural pastures in quest of the female, nor does it attack other animals with indiscriminate ferocity: however, the males combat for the female among each other; and it is not without many contests, that one buck is seen to become master of the whole herd.

It often happens also, that an herd of fallow deer is seen to divide into two parties, and engage each other with great ardour and obstinacy*. They both seem desirous of gaining some favourite spot of the park for pas-

* Buffon, vol. xii. p. 36

ture, and of driving the vanquished party into the coarser and more disagreeable parts. Each of these factions has its particular chief; namely, the two eldest and strongest of the herd. These lead on to the engagement; and the rest follow under their direction. These combats are singular enough, from the disposition and conduct which seem to regulate their mutual efforts. They attack with order, and support the assault with courage; they come to each other's assistance, they retire, they rally, and never give up the victory upon a single defeat. The combat is renewed for several days together; until at length the most feeble side is obliged to give way, and is content to escape to the most disagreeable part of the park, where only they can find safety and protection.

The fallow deer is easily tamed, and feeds upon many things which the stag refuses. By this means it preserves its venison better; and even after rutting, it does not appear entirely exhausted. It continues almost in the same state through the whole year, although there are particular seasons when its flesh is chiefly in esteem. This animal also browses closer than the stag; for which reason it is more prejudicial among young trees, which it often strips too close for recovery. The young deer eat much faster
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and more greedily than the old; they seek the female at their second year, and, like the stag, are fond of variety. The doe goes with young above eight months, like the hind; and commonly brings forth one at a time; but they differ in this, that the buck comes to perfection at three, and lives till sixteen; whereas the stag does not come to perfection till seven, and lives till forty.

As this animal is a beast of chase, like the stag, so the hunters have invented a number of names relative to him. The buck is the first year called a *fawn*; the second, a *pricket*; the third, a *sovel*; the fourth, a *sove*; the fifth, a *buck of the first head*; and the sixth, a *great buck*: The female is called a *doe*; the first year a *fawn*; and the second a *tegg*. The manner of hunting the buck is pretty much the same as that of stag hunting, except that less skill is required in the latter. The buck is more easily roused; it is sufficient to judge by the view, and mark what grove or covert it enters, as it is not known to wander far from thence; nor, like the stag, to change his *layer*, or place of repose. When hard hunted, it takes to some strong hold or cover with which it is acquainted, in the more gloomy parts of the wood, or the steeps of the mountain; not
like

like the stag, flying far before the hounds, not crossing nor doubling, nor using any of the subtleties, which the stag is accustomed to. It will take the water when sorely pressed, but seldom a great river; nor can it swim so long, nor so swiftly, as the former. In general, the strength, the cunning, and the courage of this animal, are inferior to those of the stag; and, consequently, it affords neither so long, so various, nor so obstinate a chase: besides, being lighter, and not tracking so deeply, it leaves a less powerful and lasting scent, and the dogs in the pursuit are more frequently at fault.

As the buck is a more delicate animal than the stag, so also is it subject to greater varieties*. We have in England two varieties of the fallow-deer, which are said to be of foreign origin. The beautiful spotted kind, which is supposed to have been brought from Bengal; and the very deep brown sort, that are now so common in several parts of this kingdom. These were introduced by king James the First, from Norway: for having observed their hardiness, and that they could endure the winter, even in that severe climate, without fodder, he brought over some of them into Scotland, and disposed of them among his chaces. Since that time,

* British Zoology.

they have multiplied in many parts of the British empire ; and England is now become more famous for its venison, than any other country in the world. Whatever pains the French have taken, to rival us in this particular, the flesh of their fallow-deer, of which they keep but a few, has neither the fatness nor the flavour of that fed upon English pasture.

However, there is scarce a country in Europe, except far to the northward, in which this animal is a stranger. The Spanish fallow-deer are as large as stags, but of a darker colour, and a more slender neck : their tails are longer than those of ours, they are black above, and white below. The Virginian deer are larger and stronger than ours, with great necks, and their colour inclinable to grey. Other kinds have the hoofs of their hind legs marked outwardly with a white spot ; and their ears and tails much longer than the common. One of these has been seen full of white spots, with a black list down the middle of his back. In Guiana, a country of South America, according to Labat, there are deer without horns, which are much less than those of Europe, but resembling them in every other particular. They are very lively, light of course, and excessively fearful ; their hair is of a reddish fallow,

fallow, their heads are small and lean, their ears little, their necks long and arched, the tail short, and the sight piercing. When pursued, they fly into places where no other animal can follow them. The Negroes, who pursue them, stand to watch for them in narrow paths, which lead to the brook or the meadow where they feed; there waiting in the utmost silence, for the slightest sound will drive them away, the Negroe, when he perceives the animal within reach, shoots, and is happy if he can bring down his game. Their flesh, though seldom fat, is considered as a great delicacy, and the hunter is well rewarded for his trouble.

T H E R O E - B U C K.

T H E Roe-buck is the smallest of the deer kind known in our climate, and is now almost extinct among us, except in some parts of the highlands of Scotland. It is generally about three feet long, and about two feet high. The horns are from eight to nine inches long, upright, round, and divided into only three branches. The body is covered with very long hair, well adapted to the rigour of its mountainous abode. The lower part of each hair is ash colour; near the ends is a narrow

bar of black, and the points are yellow. The hairs on the face are black, tipped with ash colour. The ears are long, their insides of a pale yellow, and covered with long hair. The spaces bordering on the eyes and mouth, are black. The chest, belly, and legs, and the inside of the thighs, are of a yellowish white; the rump is of a pure white, and the tail very short. The make of this little animal is very elegant; and its swiftness equals its beauty. It differs from the fallow-deer, in having round horns, and not flatted like theirs. It differs from the stag, in its smaller size, and the proportionable paucity of its antlers: and it differs from all of the goat kind, as it annually sheds its head, and obtains a new one, which none of that kind are ever seen to do.

As the stag frequents the thickest forests, and the sides of the highest mountains, the roe-buck, with humbler ambition, courts the shady thicket, and the rising slope. Although less in size, and far inferior in strength to the stag, it is yet more beautiful, more active, and even more courageous. Its hair is always smooth, clean and glossy; and it frequents only the driest places, and of the purest air. Though but a very little animal, as we have already observed, yet, when its young is attacked, it faces
even

even the stag himself, and often comes off victorious *. All its motions are elegant and easy ; it bounds without effort, and continues the course with but little fatigue. It is also possessed of more cunning in avoiding the hunter, is more difficult to pursue, and, although its scent is much stronger than that of the stag, it is most frequently found to make good a retreat. It is not with the roe-buck, as with the stag, who never offers to use art until his strength is beginning to decline ; this more cunning animal, when it finds that its first efforts to escape are without success, returns upon its former track, again goes forward, and again returns, until by its various windings it has entirely confounded the scent, and joined the last emanations to those of its former course. It then, by a bound, goes to one side, lies flat upon its belly, and permits the pack to pass by very near, without offering to stir.

But the roe-buck differs not only from the stag in superior cunning, but also in its natural appetites, its inclinations, and its whole habits of living. Instead of herding together, these animals live in separate families ; the sire, the dam, and the young ones, associate together, and never admit

* Buffon, vol. xii. p. 75.

a stranger into their little community. All others of the deer kind are inconstant in their affection; but the roe-buck never leaves its mate; and as they have been generally bred up together, from their first fawning, they conceive so strong an attachment, the male for the female, that they never after separate. Their rutting-season continues but fifteen days; from the latter end of October, to about the middle of November. They are not at that time, like the stag, overloaded with fat; they have not that strong odour, which is perceived in all others of the deer kind; they have none of those furious excesses; nothing, in short, that alters their state: they only drive away their fawns upon these occasions; the buck forcing them to retire, in order to make room for a succeeding progeny: however, when the copulating season is over, the fawns return to their does, and remain with them some time longer; after which, they quit them entirely, in order to begin an independent family of their own. The female goes with young but five months and an half; which alone serves to distinguish this animal from all others of the deer kind, that continue pregnant more than eight. In this respect, she rather approaches more nearly to the goat kind; from which, however,

ever, this race is separated by the male's annual casting its horns.

When the female is ready to bring forth, she seeks a retreat in the thickest part of the woods, being not less apprehensive of the buck, from whom she then separates, than of the wolf, the wild cat, and almost every ravening animal of the forest; she generally produces two at a time, and three but very rarely. In about ten or twelve days these are able to follow their dam, except in cases of warm pursuit, when their strength is not equal to the fatigue. Upon such occasions, the tenderness of the dam is very extraordinary; leaving them in the deepest thickets, she offers herself to the danger, flies before the hounds, and does all in her power to lead them from the retreat where she has lodged her little ones. Such animals as are nearly upon her own level she boldly encounters; attacks the stag, the wild cat, and even the wolf; and while she has life continues her efforts to protect her young. Yet all her endeavours are often vain; about the month of May, which is her fawning time, there is a greater destruction among those animals than at any other season of the year. Numbers of the fawns are taken alive by the peasants; numbers are found out, and worried by the dogs; and still
more

more by the wolf, which has always been their most inveterate enemy. By these continual depredations upon this beautiful creature, the roe-buck is every day becoming scarcer; and the whole race in many countries is wholly worn out. They were once common in England; the huntsmen, who characterised only such beasts as they knew, have given names to the different kinds and ages, as to the stag: thus they called it the first year an *hind*; the second, a *gyrle*; and the third, an *hemuse*; but these names at present are utterly useless, since the animal no longer exists among us. Even in France, where it was once extremely common, it is now confined to a few provinces; and it is probable that in an age or two the whole breed will be utterly extirpated. Mr. Buffon, indeed, observes, that in those districts where it is mostly found, it seems to maintain its usual plenty, and that the balance between its destruction and encrease is held pretty even; however, the number in general is known to decrease; for wherever cultivation takes place, the beasts of nature are known to retire. Many animals that once flourished in the world may now be extinct; and the descriptions of Aristotle and Pliny, though taken from life, may be considered as fabulous, as their archetypes are no longer existing.

The fawns continue to follow the deer eight or nine months in all; and upon separating, their horns begin to appear, simple and without antlers the first year, as in those of the stag kind*. These they shed at the latter end of autumn, and renew during the winter; differing in this from the stag, who sheds them in spring and renews them in summer. When the roe-buck's head is completely furnished, it rubs the horns against trees in the manner of the stag, and thus strips them of the rough skin and the blood-vessels, which no longer contribute to their nourishment and growth. When these fall, and new ones begin to appear, the roe-buck does not retire as the stag to the covert of the wood, but continues its usual haunts, only keeping down its head to avoid striking its horns against the branches of trees, the pain of which it seems to feel with exquisite sensibility. The stag, who sheds his horns in summer, is obliged to seek a retreat from the flies, that at that time greatly incommode him; but the roe-buck, who sheds them in winter, is under no such necessity; and, consequently, does not separate from its little family, but keeps with the female all the year round†.

* Buffon, vol. xii. p. 88. † Buffon, *ibid.*

As the growth of the roe-buck, and its arrival at maturity, is much speedier than that of the stag, so its life is proportionably shorter. It seldom is found to extend above twelve or fifteen years; and if kept tame it does not live above six or seven. It is an animal of a very delicate constitution, requiring variety of food, air, and exercise. It must be paired with a female, and kept in a park of at least an hundred acres. They may easily be subdued, but never thoroughly tamed. No arts can teach them to be familiar with the feeder, much less attached to him. They still preserve a part of their natural wildness, and are subject to terrors without a cause. They sometimes, in attempting to escape, strike themselves with such force against the walls of their inclosure, that they break their limbs, and become utterly disabled. Whatever care is taken to tame them, they are never entirely to be relied on, as they have capricious fits of fierceness, and sometimes strike at those they dislike with a degree of force that is very dangerous.

The cry of the roe-buck is neither so loud nor so frequent as that of the stag. The young ones have a particular method of calling to the dam, which the hunters easily imitate, and often thus allure the female to her destruction. Upon some occasions also they

they become in a manner intoxicated with their food, which, during the spring, is said to ferment in their stomachs, and they are then very easily taken. In summer they keep close under covert of the forest, and seldom venture out, except in violent heats, to drink at some river or fountain. In general, however, they are contented to flake their thirst with the dew that falls on the grass and the leaves of trees, and seldom risque their safety to satisfy their appetite. They delight chiefly in hilly grounds, preferring the tender branches and buds of trees to corn, or other vegetables; and it is universally allowed that the flesh of those between one and two years old is the greatest delicacy that is known. Perhaps also, the scarceness of it enhances its flavour.

In America this animal is much more common than in Europe. With us there are but two known varieties; the red, which is the larger sort; and the brown, with a spot behind, which is less. But in the new continent the breed is extremely numerous, and the varieties in equal proportion. In Louisiana, where they are extremely common, they are much larger than in Europe, and the inhabitants live in a great measure upon its flesh, which tastes like mutton when well fatted. They are found also in Brazil,
where

where they have the name of Cuguacu Apará, only differing from ours in some slight deviations in the horns. This animal is also said to be common in China; although such as have described it seem to confound it with the musk-goat, which is of a quite different nature.

T H E E L K.

WE have hitherto been describing minute animals in comparison of the Elk; the size of which, from concurrent testimony, appears to be equal to that of the elephant itself. It is an animal rather of the buck than the stag kind, as its horns are flatted towards the top; but it is far beyond both in stature, some of them being known to be above ten feet high. It is a native both of the old and new continent, being known in Europe under the name of the Elk, and in America by that of the Moose-deer. It is sometimes taken in the German and Russian forests, although seldom appearing; but it is extremely common in North America, where the natives pursue, and track it in the snow. The accounts of this animal are extremely various; some describing it as being no higher than an horse, and others above twelve feet high.



De Sève del.

J. N. Lodge sculp.

The Female Moose or Elk.

As the stature of this creature makes its chief peculiarity, so it were to be wished that we could come to some precision upon that head. If we were to judge of its size by the horns, which are sometimes fortuitously dug up in many parts of Ireland, we should not be much amiss in ascribing them to an animal at least ten feet high. One of these I have seen, which was ten feet nine inches from one tip to the other. From such dimensions, it is easy to perceive that it required an animal far beyond the size of an horse to support them. To bear an head with such extensive and heavy antlers, required no small degree of strength; and without all doubt the bulk of the body must have been proportionable to the size of the horns. I remember, some years ago, to have seen a small moose-deer, which was brought from America, by a gentleman of Ireland; it was about the size of an horse, and the horns were very little larger than those of a common stag: this, therefore, serves to prove that the horns bear an exact proportion to the animal's size; the small elk has but small horns; whereas those enormous ones, which we have described above, must have belonged to a proportionable creature. In all the more noble animals, nature observes a perfect symmetry; and it is not to be supposed she fails in this single instance.

stance. We have no reason, therefore, to doubt the accounts of Jocelyn and Dudley, who affirm, that they have been found fourteen spans; which, at nine inches to a span, makes the animal almost eleven feet high. Others have extended their accounts to twelve and fourteen feet, which makes this creature one of the most formidable of the forest.

There is but very little difference between the European elk, and the American moose-deer, as they are but varieties of the same animal. It may be rather larger in America than with us; as in the forest of that unpeopled country, it receives less disturbance than in our own. In all places, however, it is timorous and gentle; content with its pasture, and never willing to disturb any other animal, when supplied itself.

The European elk grows to above seven or eight feet high. In the year 1742, there was a female of this animal shewn at Paris, which was caught in a forest of Red Russia, belonging to the Cham of Tartary*; it was then but young, and its height was even at that time six feet seven inches; but the describer observes, that it has since become much taller and thicker, so that we may suppose this fe-

* Dictionnaire Raisonné des Animaux. An. Nom Élan.

male at least seven feet high. There have been no late opportunities of seeing the male; but, by the rule of proportion, we may estimate his size at eight or nine feet at the least, which is about twice as high as an ordinary horse. The height, however, of the female, which was measured, was but six feet seven inches, Paris measure; or almost seven English feet high. It was ten feet from the tip of the nose to the insertion of the tail; and eight feet round the body. The hair was very long and coarse, like that of a wild boar. The ears resembled those of a mule, and were a foot and an half long. The upper jaw was longer, by six inches, than the lower; and, like other ruminating animals, it had no teeth (cutting teeth I suppose the describer means). It had a large beard under the throat, like a goat; and in the middle of the forehead, between the horns, there was a bone as large as an egg. The nostrils were four inches long on each side of the mouth. It made use of its fore feet, as a defence against its enemies. Those who shewed it, asserted, that it ran with astonishing swiftness; that it swam also with equal expedition, and was very fond of the water. They gave it thirty pounds of bread every day, beside hay, and it drank eight buckets

buckets of water. It was tame and familiar, and submissive enough to its keeper.

This description differs in many circumstances from that which we have of the moose, or American elk, which the French call the Original. Of these there are two kinds, the common light grey moose, which is not very large; and the black moose, which grows to an enormous height. Mr. Dudley observes, that a doe or hind of the black moose kind, of the fourth year, wanted but an inch of seven feet high. All, however, of both kinds, have flat palmated horns, not unlike the fallow-deer, only that the palm is much larger, having a short trunk at the head, and then immediately spreading above a foot broad, with a kind of small antlers, like teeth, on one of the edges. In this particular, all of the elk kind agree; as well the European Elk, as the grey and the black moose-deer.

The grey moose deer is about the size of an horse; and although it has large buttocks, its tail is not above an inch long. As in all of this kind the upper lip is much longer than the under, it is said that they continue to go backward as they feed. Their nostrils are so large that a man may thrust his hand in a considerable way; and
their

their horns are as long as those of a stag, but, as was observed, much broader.

The black moose is the enormous animal mentioned above, from eight to twelve feet high. Joffeleyn, who is the first English writer that mentions it, says, that it is a goodly creature, twelve feet high, with exceeding fair horns, that have broad palms, two fathoms from the top of one horn to another. He assures us, that it is a creature, or rather a monster of superfluity, and many times bigger than an English ox. This account is confirmed by Dudley; but he does not give so great an expansion to the horns, measuring them only thirty-one inches between one tip and the other: however, that such an extraordinary animal as Joffeleyn describes, has actually existed, we can make no manner of doubt of, since there are horns common enough to be seen among us, twelve feet from one tip to the other.

These animals delight in cold countries, feeding upon grass in summer, and the bark of trees in winter. When the whole country is deeply covered with snow, the moose-deer herd together under the tall pine-trees, strip off the bark, and remain in that part of the forest while it yields them subsistence. It is at that time that the natives prepare to

hunt them ; and particularly when the sun begins to melt the snow by day, which is frozen again at night ; for then the icy crust which covers the surface of the snow, is too weak to support so great a bulk, and only retards the animal's motion. When the Indians, therefore, perceive an herd of these at a distance, they immediately prepare for their pursuit, which is not, as with us, the sport of an hour, but is attended with toil, difficulty, and danger*. The timorous animal no sooner observes its enemies approach, than it immediately endeavours to escape, but sinks at every step it takes. Still, however, it pursues its way through a thousand obstacles : the snow, which is usually four feet deep, yields to its weight, and embarrasses its speed : the sharp ice wounds its feet ; and its lofty horns are entangled in the branches of the forest, as it passes along. The trees, however, are broken down with ease ; and wherever the moose-deer runs, it is perceived by the snapping off the branches of the trees, as thick as a man's thigh, with its horns. The chase lasts in this manner for the whole day ; and sometimes it has been known to continue for two, nay three days together ; for the pursuers are often not less excited by famine, than the pursued by

* Phil. Transf. vol. ii. p. 436.

fear. Their perseverance, however, generally succeeds; and the Indian who first comes near enough, darts his lance, with unerring aim, which sticks in the poor animal, and at first encreases its efforts to escape. In this manner the moose trots heavily on, (for that is its usual pace) till its pursuers once more come up, and repeat their blow: upon this, it again summons up sufficient vigour to get an head; but, at last, quite tired, and spent with loss of blood, it sinks, as the describer expresses it, like a ruined building, and makes the earth shake beneath its fall.

This animal, when killed, is a very valuable acquisition to the hunters. The flesh is very well tasted, and said to be very nourishing. The hide is strong, and so thick that it has been often known to turn a musket-ball; however, it is soft and pliable, and, when tanned, the leather is extremely light, yet very lasting. The fur is a light grey in some, and blackish in others; and when viewed through a microscope, appears spongy like a bulrush, and is smaller at the roots and points than in the middle; for this reason, it lies very flat and smooth, and though beaten or abused ever so much, it always returns to its former state. The horns also

are not less useful, being applied to all the purposes for which hartshorn is beneficial: these are different in different animals; in some they resemble entirely those of the European elk, which spread into a broad palm, with small antlers on one of the edges; in others they have a branched brow-antler between the bur and the palm, which the German elk has not; and in this they entirely agree with those whose horns are so frequently dug up in Ireland. This animal is said to be troubled with the epilepsy, as it is often found to fall down when pursued, and thus become an easier prey; for this reason, an imaginary virtue has been ascribed to the hinder hoof, which some have supposed to be a specific against all epileptic disorders. This, however, may be considered as a vulgar error; as well as that of its curing itself of this disorder by applying the hinder hoof behind the ear. After all, this animal is but but very indifferently and confusedly described by travellers; each mixing his account with something false or trivial; often mistaking some other quadrupede for the elk, and confounding its history. Thus some have mistaken it for the rein-deer, which in every thing but size it greatly resembles; some have supposed it to be the same with the

Tapurette,



De Sève del.

J. N. Lodge sculp.

The Rein Deer.

Tapurette*, from which it entirely differs; some have described it as the common red American stag, which scarcely differs from our own; and, lastly, some have confounded it with the Bubalus, which is more properly a gazelle of Africa †.

T H E R E I N - D E E R.

O F all animals of the deer kind, the Rein-Deer is the most extraordinary and the most useful. It is a native of the icy regions of the north; and though many attempts have been made to accustom it to a more southern climate, it shortly feels the influence of the change, and in a few months declines and dies. Nature seems to have fitted it entirely to answer the necessities of that hardy race of mankind that live near the pole. As these would find it impossible to subsist among their barren snowy mountains without its aid; so this animal can live only there, where its assistance is most absolutely necessary. From it alone the natives of Lapland and Greenland supply most of their wants; it answers the purposes of an horse, to convey them and their scanty furniture from one mountain to another; it

* Condamine. † Dapper's Description de l' Afrique, p. 17.

answers the purposes of a cow, in giving milk; and it answers the purposes of the sheep, in furnishing them with a warm, though an homely kind of cloathing. From this quadrupede alone, therefore, they receive as many advantages as we derive from three of our most useful creatures; so that Providence does not leave these poor outcasts entirely destitute, but gives them a faithful domestic, more patient and serviceable than any other in nature.

The rein-deer resembles the American elk in the fashion of its horns. It is not easy in words to describe these minute differences; nor will the reader, perhaps, have a distinct idea of the similitude, when told that both have brow-antlers, very large, and hanging over their eyes, palmated towards the top, and bending forward, like a bow. But here the similitude between these two animals ends; for, as the elk is much larger than the stag, so the rein-deer is much smaller. It is lower and stronger built than the stag; its legs are shorter and thicker, and its hoofs much broader than in that animal; its hair is much thicker and warmer, its horns much larger in proportion, and branching forward over its eyes; its ears are much larger; its pace is rather a trot than a bounding, and this it can continue for a whole day;

day ; its hoofs are cloven and moveable, so that it spreads them abroad as it goes, to prevent its sinking in the snow. When it proceeds on a journey, it lays its great horns on its back, while there are two branches which always hang over its forehead, and almost cover its face. One thing seems peculiar to this animal and the elk ; which is, that as they move along, their hoofs are heard to crack with a pretty loud noise. This arises from their manner of treading ; for as they rest upon their cloven hoof, it spreads on the ground, and the two divisions separate from each other ; but when they lift it, the divisions close again, and strike against each other with a crack. The female also of the rein-deer has horns as well as the male, by which the species is distinguished from all other animals of the deer kind whatsoever.

When the rein-deer first shed their coat of hair, they are brown ; but, in proportion as summer approaches, their hair begins to grow whitish ; until, at last, they are nearly grey*. They are, however, always black about the eyes. The neck has long hair, hanging

* For the greatest part of this description of the Rein-Deer, I am obliged to Mr. Hoffberg ; upon whose authority, being a native of Sweden, and an experienced naturalist, we may confidently rely.

down, and coarser than upon any other part of the body. The feet, just at the insertion of the hoof, are surrounded with a ring of white. The hair in general stands so thick over the whole body, that if one should attempt to separate it, the skin will no where appear uncovered: whenever it falls also, it is not seen to drop from the root, as in other quadrupedes, but seems broken short near the bottom; so that the lower part of the hair is seen growing, while the upper falls away.

The horns of the female are made like those of the male, except that they are smaller and less branching. As in the rest of the deer kind, they sprout from the points; and also from the beginning, are furnished with an hairy crust, which supports the blood-vessels, of most exquisite sensibility. The rein-deer shed their horns, after rutting-time, at the latter end of November; and they are not completely furnished again till towards autumn. The female always retains hers till she brings forth, and then sheds them, about the beginning of November. If she be barren, however, which is not frequently the case, she does not shed them till winter. The castration of the rein-deer does not prevent the shedding of their horns: those which are the strongest, cast

cast them early in winter; those which are more weakly, not so soon. Thus, from all these circumstances, we see how greatly this animal differs from the common stag. The female of the rein-deer has horns, which the hind is never seen to have; the rein-deer, when castrated, renews its horns, which we are assured the stag never does: it differs not less in its habits and manner of living, being tame, submissive, and patient; while the stag is wild, capricious, and unmanageable.

The rein-deer, as was said, is naturally an inhabitant of the countries bordering on the arctic circle. It is not unknown to the natives of Siberia. The North Americans also hunt it, under the name of the *caribou*. But in Lapland, this animal is converted to the utmost advantage; and some herdsmen of that country are known to possess above a thousand in a single herd.

Lapland is divided into two districts, the mountainous and the woody. The mountainous part of the country is at best barren and bleak, and excessively cold, and uninhabitable during the winter; still, however, it is the most desirable part of this frightful region, and is most thickly peopled during the summer. The natives generally reside on the declivity of the mountains, three or four cottages together, and lead a cheerful

cheerful and a social life. Upon the approach of winter, they are obliged to migrate into the plains below, each bringing down his whole herd, which often amounts to more than a thousand, and leading them where the pasture is in greatest plenty. The woody part of the country is much more desolate and hideous. The whole face of nature there presents a frightful scene of trees without fruit, and plains without verdure. As far as the eye can reach, nothing is to be seen, even in the midst of summer, but barren fields, covered only with a moss, almost as white as snow; no grass, no flowery landscapes, only here and there a pine-tree, which may have escaped the frequent conflagrations by which the natives burn down their forests. But what is very extraordinary, as the whole surface of the country is cloathed in white, so, on the contrary, the forests seem to the last degree dark and gloomy. While one kind of moss makes the fields look as if they were covered with snow, another kind blackens over all the trees, and even hides their verdure. This moss, however, which deforms the country, serves for its only support, as upon it alone the rein-deer can subsist. The inhabitants, who, during the summer, lived
among

the mountains, drive down their herds in winter, and people the plains and the woods below. Such of the Laplanders as inhabit the woods and the plains all the year round, live remote from each other, and having been used to solitude, are melancholy, ignorant, and helpless. They are much poorer also than the mountaineers, for, while one of those is found to possess a thousand rein-deer at a time, none of these are ever known to rear the tenth part of that number. The rein-deer makes the riches of this people; and the cold mountainy parts of the country agree best with its constitution. It is for this reason, therefore, that the mountains of Lapland are preferred to the woods; and that many claim an exclusive right to the tops of hills, covered in almost eternal snow.

As soon as the summer begins to appear, the Laplander who had fed his rein-deer upon the lower grounds, during the winter, then drives them up to the mountains, and leaves the woody country, and the low pasture, which at that season are truly deplorable. The gnats bred by the sun's heat, in the marshy bottoms, and the weedy lakes, with which the country abounds more than any other part of the world, are all upon the wing, and fill the whole air,
like

like clouds of dust in a dry windy day. The inhabitants, at that time, are obliged to daub their faces with pitch, mixed with milk, to shield their skins from their depredations. All places are then so greatly infested, that the poor natives can scarce open their mouths without fear of suffocation; the insects enter, from their numbers and minuteness, into the nostrils and the eyes, and do not leave the sufferer a moment at his ease. But they are chiefly enemies to the rein-deer: the horns of that animal being then in their tender state, and possessed of extreme sensibility, a famished cloud of insects instantly settle upon them, and drive the poor animal almost to distraction. In this extremity, there are but two remedies, to which the quadrupede, as well as its master, are obliged to have recourse. The one is, for both to take shelter near their cottage, where a large fire of tree moss is prepared, which filling the whole place with smoke, keeps off the gnat, and thus, by one inconvenience, expels a greater; the other is, to ascend to the highest summit of the mountains, where the air is too thin, and the weather too cold, for the gnats to come. There the rein-deer are seen to continue the whole day, although without food, rather than to venture down into the lower parts, where

where they can have no defence against their unceasing persecutors.

Besides the gnat, there is also a gadfly, that during the summer season, is no less formidable to them. This insect is bred under their skins, where the egg has been deposited the preceding summer; and it is no sooner produced as a fly, than it again endeavours to deposit its eggs in some place similar to that from whence it came. Whenever, therefore, it appears flying over an herd of rein-deer, it puts the whole body, how numerous soever, into motion; they know their enemy, and do all they can, by tossing their horns, and running among each other, to terrify or avoid it. All their endeavours, however, are too generally without effect; the gadfly is seen to deposit its eggs, which burrowing under the skin, wound it in several places, and often bring on an incurable disorder.

In the morning, therefore, as soon as the Lapland herdsman drives his deer to pasture, his greatest care is to keep them from scaling the summits of the mountains where there is no food, but where they go merely to be at ease from the gnats and gadflies that are ever annoying them. At this time, there is a strong contest between the dogs and the deer; the one endeavouring to climb up
against

against the side of the hill, and to gain those summits that are covered in eternal snows; the other, forcing them down, by barking and threatening, and, in a manner, compelling them into the places where their food is in the greatest plenty. There the men and dogs confine them; guarding them with the utmost precaution the whole day, and driving them home at the proper seasons for milking.

The female brings forth in the middle of May, and gives milk till about the middle of October. Every morning and evening, during the summer, the herdsman returns to the cottage with his deer to be milked, where the women previously have kindled up a smoky fire, which effectually drives off the gnats, and keeps the rein-deer quiet while milking. The female furnishes about a pint, which, though thinner than that of the cow, is, nevertheless, sweeter and more nourishing. This done, the herdsman drives them back to pasture; as he neither folds nor houses them, neither provides for their subsistence during the winter, nor improves their pasture by cultivation.

Upon the return of winter, when the gnats and flies are no longer to be feared, the Laplander descends into the lower grounds;
and,

and, as there are but few to dispute the possession of that desolate country, he has an extensive range to feed them in. Their chief and almost their only food at that time, is the white moss already mentioned; which, from its being fed upon by this animal, obtains, the name of the *lichen rangiferinus*. This is of two kinds: the woody lichen, which covers almost all the desert parts of the country like snow; the other is black, and covers the branches of the trees in very great quantities. However unpleasing these may be to the spectator, the native esteems them as one of his choicest benefits, and the most indulgent gift of nature. While his fields are cloathed with moss, he envies neither the fertility nor the verdure of the more southern landscape; dressed up warmly in his deer-skin cloaths, he drives his herds along the desert; fearless and at ease, ignorant of any higher luxury than what their milk and smok-dried flesh afford him. Hardened to the climate, he sleeps in the midst of ice; or awaking, dozes away his time with tobacco; while his faithful dogs supply his place, and keep the herd from wandering. The deer, in the mean time, with instincts adapted to the soil, pursue their food, though covered in the deepest snow. They turn it up with their noses, like

like swine ; and even though its surface be frozen and stiff, yet the hide is so hardened in that part, that they easily overcome the difficulty. It sometimes, however, happens, though but rarely, that the winter commences with rain, and a frost ensuing, covers the whole country with a glazed crust of ice. Then, indeed, both the rein-deer and the Laplander are undone ; they have no provisions laid up in case of accident, and the only resource is to cut down the large pine-trees, that are covered with moss, which furnishes but a scanty supply ; so that the greatest part of the herd is then seen to perish, without a possibility of assistance. It sometimes also happens, that even this supply is wanting ; for the Laplander often burns down his woods, in order to improve and fertilize the soil which produces the moss, upon which he feeds his cattle.

In this manner the pastoral life is still continued near the pole ; neither the coldness of the winter, nor the length of the nights, neither the wildness of the forest, nor the vagrant disposition of the herd, interrupt the even tenour of the Laplander's life. By night and day he is seen attending his favourite cattle, and remains unaffected, in a season which would be speedy death to those bred up in a milder climate. He gives himself

himself no uneasiness to house his herds, or to provide a winter subsistence for them; he is at the trouble neither of manuring his grounds, nor bringing in his harvests; he is not the hireling of another's luxury; all his labours are to obviate the necessities of his own situation; and these he undergoes with chearfulness, as he is sure to enjoy the fruits of his own industry. If, therefore, we compare the Laplander with the peasant of more southern climates, we shall have little reason to pity his situation; the climate in which he lives is rather terrible to us than to him; and, as for the rest, he is blessed with liberty, plenty, and ease. The rein-deer alone supplies him with all the wants of life, and some of the conveniences, serving to shew how many advantages nature is capable of supplying, when necessity gives the call. Thus, the poor little, helpless native, who was originally, perhaps, driven by fear or famine into those inhospitable climates, would seem, at first view, to be the most wretched of mankind: but it is far otherwise, he looks round among the few wild animals that this barren country can maintain, and singles out one from among them, and that of a kind which the rest of mankind have not thought worth taking from a state of nature; this he cul-

tivates, propagates, and multiplies, and from this alone derives every comfort that can soften the severity of his situation.

The rein-deer of this country are of two kinds, the wild and the tame. The wild are larger and stronger, but more mischievous than the others. Their breed, however, is preferred to that of the tame; and the female of the latter is often sent into the woods, from whence she returns home impregnated by one of the wild kind. These are fitter for drawing the sledge, to which the Laplander accustoms them sometimes, and yokes them to it by a strap, which goes round the neck, and comes down between their legs. The sledge is extremely light, and shod at the bottom, with the skin of a young deer, the hair turned to slide on the frozen snow. The person who sits on this guides the animal with a cord, fastened round the horns, and encourages it to proceed with his voice, and drives it with a goad. Some of the wild breed, though by far the strongest, are yet found refractory, and often turn upon their drivers; who have then no other resource but to cover themselves with their sledge, and let the animal vent its fury upon that. But it is otherwise with those that are tame; no creature can be more active, patient, and willing: when hard pushed,

pushed, they will trot nine or ten Swedish miles, or between fifty and sixty English miles, at one stretch. But, in such a case, the poor obedient creature fatigues itself to death; and, if not prevented by the Laplander, who kills it immediately, it will die a day or two after. In general, they can go about thirty miles without halting, and this without any great or dangerous efforts. This, which is the only manner of travelling in that country, can be performed only in winter, when the snow is glazed over with ice: and although it be a very speedy method of conveyance, yet it is inconvenient, dangerous, and troublesome.

In order to make these animals more obedient, and more generally serviceable, they castrate them; which operation the Laplanders perform with their teeth; these become sooner fat when taken from labour; and they are found to be stronger in drawing the sledge. There is usually one male left entire for every six females; these are in rut from the Feast of St. Matthew to about Michaelmas. At this time, their horns are thoroughly burnished, and their battles among each other are fierce and obstinate. The females do not begin to breed till they are two years old; and then they continue regularly breeding every year till they are

superannuated. They go with young above eight months, and generally bring forth two at a time. The fondness of the dam for her young is very remarkable ; it often happens that when they are separated from her, she will return from pasture, keep calling round the cottage for them, and will not desist until, dead or alive, they are brought and laid at her feet. They are at first of a light brown ; but they become darker with age ; and at last the old ones are of a brown almost approaching to blackness. The young follow the dam for two or three years ; but they do not acquire their full growth until four. They are then broke in, and managed for drawing the sledge ; and they continue serviceable for four or five years longer. They never live above fifteen or sixteen years ; and, when they arrive at the proper age, the Laplander generally kills them for the sake of their skins and their flesh. This he performs by striking them on the back of the neck, with his knife, into the spinal marrow ; upon which they instantly fall, and he then cuts the arteries that lead to the heart, and lets the blood discharge itself into the cavity of the breast.

There is scarce any part of this animal that is not converted to its peculiar uses. As soon as it begins to grow old, and some
time

time before the rut, it is killed, and the flesh dried in the air. It is also sometimes hardened with smoke, and laid up for travelling provision, when the natives migrate from one part of the country to another. During the winter, the rein-deer are slaughtered as sheep with us ; and every four persons in the family are allowed one rein-deer for their week's subsistence. In spring, they spare the herd as much as they can, and live upon fresh fish. In summer, the milk and curd of the rein-deer make their chief provision ; and, in autumn, they live wholly upon fowls, which they kill with a cross-bow, or catch in springes. Nor is this so scanty an allowance ; since, at that time, the sea-fowls come in such abundance that their ponds and springs are covered over. These are not so shy as with us, but yield themselves an easy prey. They are chiefly allured to those places by the swarms of gnats which infest the country during summer, and now repay the former inconveniences, by inviting such numbers of birds as supply the natives with food a fourth part of the year, in great abundance.

The milk, when newly taken, is warmed in a cauldron, and thickened with rennet, and then the curd is pressed into cheeses, which are little and well tasted. These are never
found

found to breed mites as the cheese of other countries, probably because the mite fly is not to be found in Lapland. The whey which remains is warmed up again, and becomes of a consistence as if thickened with the white of eggs. Upon this the Laplanders feed during the summer; it is pleasant and well tasted, but not very nourishing. As to the butter they very seldom make any, because the milk affords but a very small quantity, and this, both in taste and consistence, is more nearly resembling to suet. They never keep their milk till it turns sour; and do not dress it into the variety of dishes which the more southern countries are known to do. The only delicacy they make from it is with wood sorrel, which being boiled up with it, and coagulating, the whole is put into casks, or deer-skins; and kept under ground to be eaten in winter.

The skin is even a more valuable part of this animal than either of the former. From that part of it which covered the head and feet, they make their strong snow shoes with the hair on the outside. Of the other parts they compose their garments, which are extremely warm, and which cover them all over. The hair of these also is on the outside; and they sometimes line them within with the fur of the Glutton, or some other warm

warm furred animal of that climate. These skins also serve them for beds. They spread them on each side of the fire, upon the leaves of the dwarf birch-tree, and in this manner lie both soft and warm. Many garments made of the skin of the rein-deer, are sold every year to the inhabitants of the more southern parts of Europe; and they are found so serviceable in keeping out the cold, that even people of the first rank are known to wear them.

In short, no part of this animal is thrown away as useless. The blood is preserved in small casks, to make sauce with the marrow in spring. The horns are sold to be converted into glue. The sinews are dried, and divided so as to make the strongest kind of sewing thread, not unlike catgut. The tongues, which are considered as a great delicacy, are dried, and sold into the more southern provinces. The intestines themselves are washed like our tripe, and in high esteem among the natives. Thus the Laplander finds all his necessities amply supplied from this single animal; and he who has a large herd of these animals has no idea of higher luxury.

But, although the rein-deer be a very hardy and vigorous animal, it is not without its diseases. I have already mentioned the
pain

pain it feels from the gnat, and the apprehensions it is under from the gad-fly. Its hide is often found pierced in an hundred places, like a sieve, from this insect, and not a few die in their third year, from this very cause. Their teats also are subject to cracking, so that blood comes instead of milk. They sometimes take a loathing for their food; and, instead of eating, stand still, and chew the cud. They are also troubled with a vertigo, like the elk, and turn round often till they die. The Laplander judges of their state by the manner of their turning. If they turn to the right, he judges their disorder but slight; if they turn to the left, he deems it incurable. The rein-deer are subject to ulcers near the hoof, which unqualifies them for travelling, or keeping with the herd. But the most fatal disorder of all is that which the natives call the suddataka, which attacks this animal at all seasons of the year. The instant it is seized with this disease it begins to breathe with greater difficulty, its eyes begin to stare, and, its nostrils to expand. It acquires also an unusual degree of ferocity, and attacks all it meets indiscriminately. Still, however, it continues to feed as if in health, but is not seen to chew the cud, and it lies down more frequently than before. In this manner it continues,

every

every day consuming and growing more lean, till at last it dies from mere inanition; and not one of those that are attacked with this disorder are ever found to recover. Notwithstanding, it is but very lately known in that part of the world; although, during the last ten or fifteen years, it has spoiled whole provinces of this necessary creature. It is contagious; and the moment the Laplander perceives any of his herd infected, he hastens to kill them immediately, before it spreads any farther. When examined internally, there is a frothy substance found in the brain, and round the lungs: the intestines are lax and flabby, and the spleen is diminished almost to nothing. The Laplander's only cure in all these disorders, is to anoint the animal's back with tar; if this does not succeed, he considers the disease as beyond the power of art; and, with his natural phlegm, submits to the severities of fortune.

Besides the internal maladies of this animal, there are some external enemies which it has to fear. The bears now and then make depredations upon the herd; but of all their persecutors, the creature called the Glutton is the most dangerous and the most successful. The war between these is carried on not less in Lapland than in North America, where the rein-deer is called the Caribow,

bow, and the Glutton the Carcajou. This animal, which is not above the size of a badger, waits whole weeks together for its prey, hid in the branches of some spreading tree; and when the wild rein-deer, passes underneath, it instantly drops down upon it, fixing its teeth and claws into the neck, just behind the horns. It is in vain that the wounded animal then flies for protection, that it rustles among the branches of the forest, the Glutton still holds its former position; and, although it often loses a part of its skin and flesh, which are rubbed off against the trees, yet it still keeps fast, until its prey drops with fatigue and loss of blood. The deer has but one only method of escape, which is by jumping into the water; that element its enemy cannot endure; for, as we are told, it quits its hold immediately, and then thinks only of providing for its own proper security.

C H A P. VI.

Of Quadrupedes of the Hog Kind.

ANIMALS of the hog kind seem to unite in themselves all those distinctions by which others are separated. They resemble those of the horse kind in the number of their teeth, which in all amount to forty-four, in the length of their head, and in having but a single stomach. They resemble the cow kind in their cloven hoofs and the position of their intestines; and they resemble those of the claw-footed kind in their appetite for flesh, in their not chewing the cud, and in their numerous progeny. Thus this species serves to fill up that chasm which is found between the carnivorous kinds and those that live upon grass: being possessed of the ravening appetite of the one, and the inoffensive nature of the other. We may consider them, therefore, as of a middle nature, which we can refer neither to the rapacious nor the peaceful kinds, and yet partaking somewhat of the nature of both. Like the rapacious kinds, they are found to have short intestines; their hoofs also, though cloven to the sight, will, upon anatomical inspection, appear to be supplied with bones like beasts of prey; and the number
of

of their teats also encrease the similitude: on the other hand, in a natural state they live upon vegetables, and seldom seek after animal food, except when urged by necessity. They offend no other animal of the forest at the same time that they are furnished with arms to terrify the bravest.

The Wild Boar, which is the original of all the varieties we find in this creature, is by no means so stupid nor so filthy an animal as that we have reduced to tameness; he is much smaller than the tame hog, and does not vary in his colour as those of the domestic kind do, but is always found of an iron grey, inclining to black; his snout is much longer than that of the tame hog, and the ears are shorter, rounder, and black; of which colour are also the feet and tail. He roots the ground in a different manner from the common hog; for as this turns up the earth in little spots here and there, so the wild boar plows it up like a furrow, and does irreparable damage in the cultivated lands of the farmer. The tusks also of this animal are larger than in the tame breed, some of them being seen almost a foot long*. These, as is well known, grow from both the under and upper jaw, bend upwards circularly, and are exceeding sharp

* Buffon, vol. ix. p. 147.

at the points. They differ from the tusks of the elephant in this, that they never fall; and it is remarkable of all the hog kind, that they never shed their teeth as other animals are seen to do. The tusks of the lower jaw are always the most to be dreaded, and are found to give very terrible wounds.

The wild boar can properly be called neither a solitary nor a gregarious animal. The three first years the whole litter follows the sow, and the family lives in a herd together. They are then called beasts of company, and unite their common forces against the invasions of the wolf, or the more formidable beasts of prey. Upon this their principal safety while young depends, for when attacked they give each other mutual assistance, calling to each other with a very loud and fierce note; the strongest face the danger; they form a ring, and the weakest fall into the center. In this position few ravenous beasts dare venture to attack them, but pursue the chace where there is less resistance and danger. However, when the wild boar is come to a state of maturity, and when conscious of his own superior strength, he then walks the forest alone, and fearless. At that time he dreads no single creature, nor does he turn out of his way even for
man

man himself. He does not seek danger, and he does not much seem to avoid it.

This animal is therefore seldom attacked, but at a disadvantage, either by numbers, or when found sleeping by moon-light. The hunting the wild boar is one of the principal amusements of the nobility in those countries where it is to be found. The dogs provided for this sport are of the slow heavy kind. Those used for hunting the stag, or the roe-buck, would be very improper, as they would too soon come up with their prey; and, instead of a chase, would only furnish out an engagement. A small mastiff is therefore chosen; nor are the hunters much mindful of the goodness of their nose, as the wild boar leaves so strong a scent, that it is impossible for them to mistake its course. They never hunt any but the largest and the oldest, which are known by their tracks. When the boar is *rear'd*, as is the expression for driving him from his covert, he goes slowly and uniformly forward, not much afraid, nor very far before his pursuers. At the end of every half mile, or thereabouts, he turns round, stops till the hounds come up, and offers to attack them. These, on the other hand, knowing their danger, keep off, and bay him at a distance. After they have for a while gazed upon each other,

with

with mutual animosity, the boar again slowly goes on his course, and the dogs renew their pursuit. In this manner the charge is sustained, and the chase continues till the boar is quite tired, and refuses to go any farther. The dogs then attempt to close in upon him from behind; those which are young, fierce, and unaccustomed to the chase, are generally the foremost, and often lose their lives by their ardour. Those which are older and better trained are content to wait until the hunters come up, who strike at him with their spears, and, after several blows, dispatch or disable him. The instant the animal is killed, they cut off the testicles which would otherwise give a taint to the flesh; and the huntsmen celebrate the victory with their horns.

The hog, in a natural state, is found to feed chiefly upon roots and vegetables; it seldom attacks any other animal, being content with such provisions as it procures without danger. Whatever animal happens to die in the forest, or is so wounded that it can make no resistance, becomes a prey to the hog, who seldom refuses animal food, how putrid soever, although it is never at the pains of taking or procuring it alive. For this reason, it seems a glutton rather by accident than choice, content with vegetable

getable food, and only devouring flesh when pressed by necessity, and when it happens to offer. Indeed, if we behold the hog in its domestic state, it is the most fordid and brutal animal in nature*. The aukwardness of its form seems to influence its appetites; and all its sensations are as gross as its shapes are unsightly. It seems possessed only of an insatiable desire of eating; and seems to make choice only of what other animals find the most offensive. But we ought to consider that the hog with us is in an unnatural state, and that it is in a manner compelled to feed in this filthy manner from wanting that proper nourishment which it finds in the forest. When in a state of wildness, it is of all other quadrupedes the most delicate in the choice of what vegetables it shall feed on, and rejects a greater number than any of the rest. The cow, for instance, as we are assured by Linnæus, eats two hundred and seventy-six plants, and rejects two hundred and eighteen; the goat eats four hundred and forty-nine, and rejects an hundred and twenty-six; the sheep eats three hundred and eighty-seven, and rejects an hundred and forty-one; the horse eats two hundred and sixty-two, and rejects two hundred and twelve; but the hog, more nice

* Buffon, vol. ix. p. 14.

in its provision than any of the former, eats but seventy-two plants, and rejects an hundred and seventy-one. The indelicacy of this animal is, therefore, rather in our apprehensions than in its nature; since we find it makes a very distinguishing choice in the quality of its food; and if it does not reject animal putrefaction, it may be because it is abridged in that food which is most wholesome and agreeable to it in a state of nature. This is certain, that its palate is not insensible to the difference of eatables; for, where it finds variety, it will reject the worst, with as distinguishing a taste as any other quadrupede whatsoever*. In the orchards of peach-trees in North America, where the hog has plenty of delicious food, it is observed, that it will reject the fruit that has lain but a few hours on the ground, and continue on the watch whole hours together for a fresh windfall.

However, the hog is naturally formed in a more imperfect manner than the other animals that we have rendered domestic around us, less active in its motions, less furnished with instinct in knowing what to pursue or avoid. Without attachment, and incapable of instruction, it continues, while it lives, an

* British Zoology, vol. i. p. 42.

useless, or rather a rapacious dependant. The coarseness of its hair, and the thickness of its hide, together with the thick coat of fat that lies immediately under the skin, render it insensible to blows, or rough usage. Mice have been known to burrow in the back of these animals while fattening in the sty *, without their seeming to perceive it. Their other senses seem to be in tolerable perfection ; they scent the hounds at a distance ; and, as we have seen, they are not insensible in the choice of their provisions.

The hog is, by nature, stupid, inactive, and drowsy ; if undisturbed, it would sleep half its time ; but it is frequently awaked by the calls of appetite, which when it has satisfied, it goes to rest again. Its whole life is thus a round of sleep and gluttony ; and if supplied with sufficient food, it soon grows unfit even for its own existence ; its flesh becomes a greater load than its legs are able to support, and it continues to feed lying down, or kneeling, an helpless instance of indulged sensuality. The only time it seems to have passions of a more active nature, are, when it is incited by venery, or when the wind blows with any vehemence. Upon this occasion, it is so agitated as to run violently towards its sty, screaming horribly

* Buffon.

at the same time, which seems to argue that it is naturally fond of a warm climate. It appears also to foresee the approach of bad weather, bringing straw to its sty in its mouth, preparing a bed, and hiding itself from the impending storm. Nor is it less agitated when it hears any of its kind in distress; when a hog is caught in a gate, as is often the case, or when it suffers any of the usual domestic operations of ringing or spaying, all the rest are then seen to gather round it, to lend their fruitless assistance, and to sympathize with its sufferings. They have often also been known to gather round a dog that had teased them, and kill him upon the spot.

Most of the diseases of this animal arise from intemperance; measles, imposthumes, and scrophulous swellings, are reckoned among the number. It is thought by some that they wallow in the mire to destroy a sort of louse or insect that is often found to infest them; however, they are generally known to live, when so permitted, to eighteen or twenty years; and the females produce till the age of fifteen. As they produce from ten to twenty young at a litter, and that twice a year, we may easily compute how numerous they would shortly become, if not diminished by human industry. In the wild state they are less prolific; and

the sow of the woods brings forth but once a year, probably because exhausted by rearing up her former numerous progeny.

It would be superfluous to dwell longer upon the nature and qualities of an animal too well known to need a description : there are few, even in cities, who are unacquainted with its uses, its appetites, and way of living. The arts of fattening, rearing, guarding, and managing hogs, fall more properly under the cognizance of the farmer than the naturalist ; they make a branch of domestic œconomy, which, properly treated, may be extended to a great length : but the history of nature ought always to end where that of art begins. It will be sufficient, therefore, to observe that the wild boar was formerly a native of our country, as appears from the laws of Hoeldda *, the famous Welch legislator, who permitted his grand huntsman to chase that animal from the middle of November to the middle of December. William the Conqueror also punished such as were convicted of killing the wild boar in his forests, with the loss of their eyes. At present, the whole wild breed is extinct ; but no country makes greater use of the tame kinds, as their flesh, which bears salt bet-

* British Zoology, vol. 1. p. 44.

ter than that of any other animal, makes a principal part of the provisions of the British Navy.

As this animal is a native of almost every country, there are some varieties found in the species. That which we call the East-India breed, is lower, less furnished with hair, is usually black, and has the belly almost touching the ground; it is now common in England, to fatten more easily than the ordinary kinds, and to make better bacon.

There is a remarkable variety of this animal about Upsa †, which is single hoofed, like the horse; but in no other respect differing from the common kinds. The authority of Aristotle, who first made mention of this kind, has been often called in question; some have asserted, that such a quadrupede never existed, because it happened not to fall within the sphere of their own confined observation; however, at present, the animal is too well known to admit of any doubt concerning it. The hog common in Guinea differs also in some things from our own: though shaped exactly as ours, it is of a reddish colour, with long ears, which end in a sharp point, and a tail which hangs down to the pastern; the whole body is covered with short red shining hair, without any bristles,

† Amœnit, Accad. vol. v. p. 465

but pretty long near the tail. Their flesh is said to be excellent, and they are very tame.

All these, from their near resemblance to the hog, may be considered as of the same species; the East-Indian hog, we well know, breeds with the common kind; whether the same obtains between it, and those of Upsal and Guinea, we cannot directly affirm; but where the external similitude is so strong, we may be induced to believe, that the appetites and habits are the same. It is true, we are told, that the Guinea breed will not mix with ours, but keep separate, and herd only together: however, this is no proof of their diversity, since every animal will prefer its own likeness in its mate; and they will only then mix with another sort, when deprived of the society of their own. These, therefore, we may consider as all of the hog kind; but there are other quadrupedes, that, in general, resemble this species, which, nevertheless, are very distinct from them. Travellers, indeed, from their general form, or from their habits and way of living, have been content to call these creatures hogs also: but upon a closer inspection, their differences are found to be such as entirely to separate the kinds, and make each a distinct animal by itself.

THE PECCARY, OR TAJACU.

THAT animal which of all others most resembles an hog, and yet is of a formation very distinct from it, is called the Peccary, or Tajacu. It is a native of America, and found there, in such numbers, that they are seen in herds of several hundreds together, grazing among the woods and inoffensive, except when offended.

The Peccary at first view resembles a small hog; the form of its body, the shape of its head, the length of its snout, and the form of its legs, are entirely alike: however, when we come to examine it nearer, the differences begin to appear. The body is not so bulky; its legs not so long; its bristles much thicker and stronger than those of the hog, resembling rather the quills of a porcupine, than hair; instead of a tail, it has only got a little fleshy protuberance, which does not even cover its posteriors; but that which is still more extraordinary, and in which it differs from all other quadrupedes whatsoever, is, that it has got upon its back a lump resembling the navel in other animals which is found to separate a liquor of a very strong smell. The Peccary is the only creature that has those kind of glands which discharge the musky

musky substance, on that part of its body. Some have them under the belly, and others under the tail; but this creature, by a conformation peculiar to itself, has them on its back. This lump, or navel, is situated on that part of the back which is over the hinder legs; it is, in general, so covered with long bristles, that it cannot be seen, except they be drawn aside. A small space then appears, that is almost bare, and only beset with a few short fine hairs. In the middle it rises like a lump; and in this there is an orifice, into which one may thrust a common goose quill. This hole or bag is not above an inch in depth: and round it, under the skin, are situated a number of small glands, which distil a whitish liquor, which, in colour and substance, resembles that obtained from the civet animal. Perhaps it was this analogy, that led Dr. Tyson to say, that it smelt agreeably also, like that perfume. But this Mr. Buffon absolutely denies; affirming, that the smell is at every time, and in every proportion, strong and offensive; and to this I can add my own testimony, if that able naturalist should want a voucher.

But, to be more particular in the description of the other parts of this quadrupede; the colour of the body is grizly, and beset with
bristles,

bristles, thicker and stronger than those of a common hog; though not near so thick as those of a porcupine, they resemble, in this respect, that they are variegated with black and white rings. The belly is almost bare; and the short bristles on the sides, gradually encrease in length, as they approach the ridge of the back, where some are five inches long. On the head also, between the ears, there is a large tuft of bristles, that are chiefly black. The ears are about two inches and an half long, and stand upright; and the eyes resemble those of a common hog, only they are smaller. From the lower corner of the eye to the snout, is usually six inches; and the snout itself is like that of an hog's, though it is but small. One side of the lower lip is generally smooth, by the rubbing of the tusk of the upper jaw. The feet and hoofs are perfectly like those of a common hog; but, as was already observed, it has no tail. There are some anatomical differences in its internal structure, from that of the common hog. Dr. Tyson was led to suppose, that it had three stomachs; whereas the hog has but one: however, in this he was deceived, as Mr. Daubenton has plainly shewn, that the stomach is only divided by two closings, which give it the appearance as if divided into three; and there

there is no conformation that prevents the food in any part of it, from going or returning to any other.

The peccary may be tamed like the hog, and has pretty nearly the same habits and natural inclinations. It feeds upon the same aliments; its flesh, though drier and leaner than that of the hog, is pretty good eating; it is improved by castration; and, when killed, not only the parts of generation must be taken instantly away, but also the navel on the back, with all the glands that contribute to its supply. If this operation be deferred for only half an hour, the flesh becomes utterly unfit to be eaten.

The peccary is extremely numerous in all the parts of Southern America. They go in herds of two or three hundred together; and unite, like hogs, in each other's defence. They are particularly fierce when their young are attempted to be taken from them. They surround the plunderer, attack him without fear, and frequently make his life pay the forfeit of his rashness. When any of the natives are pursued by an herd in this manner, they frequently climb a tree to avoid them; while the peccaries gather round the root, threaten with their tusks, and their rough bristles standing erect, as in
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the hog kind, they assume a very terrible appearance. In this manner they remain at the foot of the tree for hours together; while the hunter is obliged to wait patiently, and not without apprehensions, until they think fit to retire.

The peccary is rather fond of the mountainous parts of the country, than the lowlands; it seems to delight neither in the marshes nor the mud, like our hogs; it keeps among the woods, where it subsists upon wild fruits, roots, and vegetables; it is also an unceasing enemy to the lizard, the toad, and all the serpent kinds, with which these uncultivated forests abound. As soon as it perceives a serpent, or a viper, it at once seizes it with its fore hoofs and teeth, skins it in an instant, and devours the flesh. This is often seen, and may, therefore, be readily credited: but as to its applying to a proper vegetable immediately after, as an antidote to the poison of the animal it had devoured, this part of the relation we may very well suspect. The flesh, neither of the toad or viper, as every one now knows, are poisonous; and, therefore, there is no need of a remedy against their venom. Ray gives no credit to either part of the account; however, we can have no reason to disbelieve that it feeds upon toads and serpents; it

it is only the making use of a vegetable antidote, that appears improbable, and which perhaps had its rise in the ignorance and credulity of the natives.

The peccary, like the hog, is very prolific; the young ones follow the dam, and do not separate till they have come to perfection. If taken at first, they are very easily tamed, and soon lose all their natural ferocity; however, they never shew any remarkable signs of docility, but continue stupid and rude, without attachment, or even seeming to know the hand that feeds them. They only continue to do no mischief; and they may be permitted to run tame, without apprehending any dangerous consequences. They seldom stray far from home; they return of themselves to the sty; and do not quarrel among each other, except when they happen to be fed in common. At such times, they have an angry kind of growl, much stronger and harsher than that of an hog; but they are seldom heard to scream as the former, only now and then, when frightened, or irritated, they have an abrupt angry manner of blowing like the boar.

The peccary, though like the hog in so many various respects, is, nevertheless, a very distinct race, and will not mix, nor produce an intermediate breed. The European
hog



De Saville del.

Jno. Lodge sculp.

The Peccary.

hog has been transplanted into America, and suffered to run wild among the woods ; it is often seen to herd among a drove of peccaries, but never to breed from them. They may, therefore, be considered as two distinct creatures ; the hog is the larger, and the more useful animal ; the peccary, more feeble and local ; the hog subsists in most parts of the world, and in almost every climate ; the peccary is a native of the warmer regions, and cannot subsist in ours, without shelter and assistance. It is more than probable, however, that we could readily propagate the breed of this quadrupede, and that, in two or three generations, it might be familiarized to our climate : but as it is inferior to the hog, in every respect, so it would be needless to admit a new domestic, whose services are better supplied in the old.

THE CAPIBARA, OR CABIAI.

THERE are some quadrupedes so entirely different from any that we are acquainted with, that it is hard to find a well known animal to which to resemble them. In this case, we must be content to place them near such as they most approach in form and habits, so that the reader may at once have some idea of the creature's shape or disposition, although

although, perhaps, an inadequate and a very confused one.

Upon that confused idea, however, it will be our business to work; to bring it, by degrees, to greater precision; to mark out the differences of form, and thus give the clearest notions that words can easily convey. The known animal is a kind rude sketch of the figure we want to exhibit; from which, by degrees, we fashion out the shape of the creature we desire should be known; as a statuary seldom begins his work, till the rude outline of the figure is given by some other hand.—In this manner, I have placed the Capibara among the hog kind, merely because it is more like an hog than any other animal commonly known, and yet, more closely examined, it will be found to differ in some of the most obvious particulars.

The Capibara resembles an hog of about two years old, in the shape of its body, and the coarseness and colour of its hair. Like the hog, it has a thick short neck, and a rounded bristly black; like the hog, it is fond of the water and marshy places, brings forth many at a time, and, like it, feeds upon animal and vegetable food. But, when examined more nearly, the differences are many and obvious. The head is longer, the eyes are larger, and the snout, instead

instead of being rounded, as in the hog, is split, like that of a rabbit or hare, and furnished with thick strong whiskers; the mouth is not so wide, the number and the form of the teeth is different, for it is without tusks: like the peccary, it wants a tail; and, unlike to all others of this kind, instead of a cloven hoof, it is in a manner web-footed, and thus entirely fitted for swimming and living in the water. The hoofs before are divided into four parts; and those behind, into three; between the divisions, there is a prolongation of the skin, so that the foot, when spread in swimming, can bear a greater surface of water.

As its feet is thus made for the water, so it is seen to delight entirely in that element; and some naturalists have called it the Water-hog for that reason. It is a native of South America, and is chiefly seen frequenting the borders of lakes and rivers, like the otter. It seizes the fish upon which it preys, with its hoofs and teeth, and carries them to the edge of the lake, to devour them at its ease. It lives also upon fruits, corn, and sugar-canes. As its legs, are long and broad, it is often seen sitting up, like a dog that is taught to beg. Its cry more nearly resembles the braying of an ass, than the grunting of an hog. It seldom goes out, except at night,

night, and that always in company. It never ventures far from the sides of the river or the lake in which it preys; for as it runs ill, because of the length of its feet, and the shortness of its legs, so its only place of safety is the water, into which it immediately plunges when pursued, and keeps so long at the bottom, that the hunter can have no hopes of taking it there. The Capibara, even in a state of wildness, is of a gentle nature, and, when taken young, is easily tamed. It comes and goes at command, and even shews an attachment to its keeper. Its flesh is said to be fat and tender, but, from the nature of its food, it has a fishy taste, like that of all those which are bred in the water. Its head, however, is said to be excellent; and, in this, it resembles the beaver, whose fore parts taste like flesh, and the hinder like the fish it feeds on.

THE BABYROUESSA, OR INDIAN HOG.

THE Babyrouessa is still more remote from the hog kind than the capibara; and yet most travellers who have described this animal, do not scruple to call it the Hog of Bouro, which is an island in the East-Indies, where it is principally to be found. Probably the animal's figure upon the whole most resembles



De Sève del.

J. C. Lodge sculp.

The Cabiai.



Jno. Lodge Sculp.

The Babirouessa.

resembles that of the hog kind, and may have induced them to rank it among the number: however, when they come to its description, they represent it as having neither the hair, the bristles, the head, the stature, nor the tail of an hog. Its legs, we are told, are longer, its snout shorter, its body more slender, and somewhat resembling that of a stag; its hair is finer, of a grey colour, rather resembling wool than bristles, and its tail also tufted with the same. From these varieties, therefore, it can scarcely be called an hog; and yet, in this class we must be content to rank it until its form and nature come to be better known. What we at present principally distinguish it by are four enormous tusks, that grow out of each jaw; the two largest from the upper, and the two smallest from the under. The jaw-bones of this extraordinary animal are found to be very thick and strong; from whence these monstrous tusks are seen to proceed, that distinguish it from all other quadrupedes whatsoever. The two that go from the lower jaw are not above a foot long, but those of the upper are above half a yard: as in the boar, they bend circularly, and the two lower stand in the jaw as they are seen to do in that animal; but the two upper rise from the upper jaw, rather like horns than teeth;

and, bending upwards and backwards, sometimes have their points directed to the animal's eyes, and are often fatal by growing into them. Were it not that the Babyroussa has two such large teeth underneath, we might easily suppose the two upper to be horns; and, in fact, their sockets are directed upwards; for which reason Doctor Grew was of that opinion. But, as the teeth of both jaws are of the same consistence, and as they both grow out of sockets in the same manner, the analogy between both is too strong not to suppose them of the same nature. The upper teeth, when they leave the socket, immediately pierce the upper lips of the animal, and grow as if they immediately went from its cheek. The tusks in both jaws are of a very fine ivory, smoother and whiter than that of the elephant, but not so hard or serviceable.

These enormous tusks give this animal a very formidable appearance; and yet it is thought to be much less dangerous than the wild boar*. Like animals of the hog kind, they go together in a body, are often seen in company with the wild boar, with which, however, they are never known to engender. They have a very strong scent, which discovers them to the hounds; and, when pur-

* Buffon, vol. xxv. p. 179.

sued, they growl dreadfully, often turning back upon the dogs, and wounding them with the tusks of the lower jaw, for those of the upper are rather an obstruction than a defence. They run much swifter than the boar, and have a more exquisite scent, winding the men and the dogs at a great distance. When hunted closely, they generally plunge themselves into the sea, where they swim with great swiftness and facility, diving, and rising again at pleasure; and in this manner they most frequently escape their pursuers. Although fierce and terrible when offended, yet they are peaceable and harmless when unmolested. They are easily tamed, and their flesh is good to be eaten; but it is said to putrefy in a very short time. They have a way of reposing themselves different from most other animals of the larger kind; which is by hitching one of their upper tusks on the branch of a tree, and then suffering their whole body to swing down at ease. Thus suspended by a tooth, they continue the whole night quite secure; and out of the reach of such animals as hunt them for prey.

The Babyrouessa, though by its teeth and tusks it seems fitted for a state of hostility, and probably is carnivorous, yet, nevertheless, seems chiefly to live upon vegetables

and the leaves of trees. It seldom seems to break into gardens, like the boar, in order to pillage the more succulent productions of human industry, but lives remote from mankind, content with coarser fare and security. It has been said that it was only to be found in the island of Borneo, but this is a mistake, as it is well known in many other parts, both of Asia and Africa, as at the Celebes, at Estrila, Senegal, and Madagascar*.

Such are the animals of the hog kind, which are not distinctly known; and even all these, as we see, have been but imperfectly examined, or described. There are some others of which we have still more imperfect notices; such as the Warree, an hog of the isthmus of Darien, described by Waffer, with large tusks and small ears, and bristles like a coarse fur all over the body. This, however, may be the European hog, which has run wild in that part of the new world, as no other traveller has taken notice of the same. The Canary boar seems different from other animals of this kind, by the largeness of its tusks; and, as is judged from the skeleton, by the aperture of its nostrils, and the number of its grinders. I cannot conclude this account of those animals that are thus furnished with enormous

* Anderson's Natural History of Greenland.

tusks, without observing that there is a strong consent between these and the parts of generation. When castrated, it is well known that the tusks grow much smaller, and are scarce seen to appear without the lips; but what is still more remarkable, is that in a boar, if the tusks by any accident or design be broke away, the animal abates of its fierceness and venery, and it produces nearly the same effect upon its constitution as if castration had actually taken place*.

* Lisle's Husbandry, vol. ii. p. 329.

C H A P. VII.

Animals of the Cat Kind.

WE have hitherto been describing a class of peaceful and harmless animals, that serve as the instruments of a man's happiness, or at least that do not openly oppose him. We come now to a bloody and unrelenting tribe, that disdain to own his power and carry on unceasing hostilities against him. All the class of the cat kind are chiefly distinguished by their sharp and formidable claws, which they can hide and extend at pleasure. They lead a solitary ravenous life, neither uniting for their mutual defence, like vegetable feeders, nor for their mutual support, like those of the dog kind. The whole of this cruel and ferocious tribe seek their food alone; and, except at certain seasons, are even enemies to each other. The dog, the wolf, and the bear, are sometimes known to live upon vegetable or farinaceous food; but all of the cat kind, such as the lion, the tiger, the leopard, and the ounce, devour nothing but flesh, and starve upon any other provision.

They are, in general, fierce, rapacious, subtle and cruel, unfit for society among each other, and incapable of adding to human

man happiness. However, it is probable that even the fiercest could be rendered domestic, if man thought the conquest worth the trouble. Lions have been yoked to the chariots of conquerors, and tigers have been taught to tend those herds which they are known at present to destroy ; but these services are not sufficient to recompense for the trouble of their keeping ; so that ceasing to be useful, they continue to be noxious, and become rebellious subjects because not taken under equal protection with the rest of the brute creation.

Other tribes of animals are classed with difficulty ; have often but few points of resemblance ; and, though alike in form, have different dispositions, and different appetites. But all those of the cat kind, although differing in size, or in colour, are yet nearly allied to each other ; being equally fierce, rapacious, and artful ; and he that has seen one has seen all. In other creatures there are many changes wrought by human assiduity ; the dog, the hog, or the sheep, are altered in their natures and form, just as the necessities or the caprice of mankind have found fitting ; but all of this kind are inflexible in their forms, and wear the print of their natural wildness strong upon them. The dogs or cows vary in different countries,

tries, but lions or tigers are still found the same; the very colour is nearly alike in all; and the slightest alterations are sufficient to make a difference in the kinds, and to give the animal a different denomination.

The cat kind are not less remarkable for the sharpness and strength of their claws, which are thrust forth from their sheath when they seize their prey, than for the shortness of their snout, the roundness of their head, and the large whiskers which grow on the upper lip. Their teeth also, which amount to the number of thirty, are very formidable; but are rather calculated for tearing their prey than for chewing it; for this reason they feed but slowly; and while they eat, generally continue growling, to deter others from taking a share. In the dog kind, the chief power lies in the under jaw, which is long, and furnished with muscles of amazing strength; but in these the greatest force lies in the claws, which are extended with great ease, and their gripe is so tenacious that nothing can open it. The hinder parts in all these animals are much weaker than those before; and they seem less made for strength than agility. Nor are they endued with the swiftness of most other animals; but generally owe their subsistence rather to catching their prey by surprize than

than by hunting it fairly down. They all seize it with a bound, at the same time expressing their fierce pleasure with a roar; and their first grasp generally disables the captive from all further resistance. With all these qualifications for slaughter, they nevertheless seem timid and cowardly, and seldom make an attack, like those of the dog kind, at a disadvantage: on the contrary, they fly when the force against them is superior, or even equal to their own; and the lion himself will not venture to make a second attempt, where he has been once repulsed with success. For this reason, in countries that are tolerably inhabited, the lion is so cowardly, that he is often scared away by the cries of women and children.

The cat, which is the smallest animal of this kind, is the only one that has been taken under human protection, and may be considered as a faithless friend, brought to oppose a still more insidious enemy*. It is, in fact, the only animal of this tribe whose services can more than recompense the trouble of their education, and whose strength is not sufficient to make its anger formidable. The lion or the tiger may easily be tamed, and rendered subservient to human

* This description is nearly translated from Mr. Buffon: what is added by me, is marked with inverted commas.

command;

command ; but even in their humblest, and most familiar moments, they are still dangerous ; since their strength is such, that the smallest fit of anger or caprice may have dreadful consequences. But the cat, though easily offended and often capricious in her resentments, is not endued with power sufficient to do any great mischief. Of all animals, when young, there is none more prettily playful than the kitten ; but it seems to lose this disposition as it grows old, and the innate treachery of its kind is then seen to prevail. From being naturally ravenous, education teaches it to disguise its appetites, and to watch the favourable moment of plunder ; supple, insinuating, and artful, it has learned the arts of concealing its intentions till it can put it into execution ; when the opportunity offers, it at once seizes upon whatever it finds, flies off with it, and continues at a distance till it supposes its offence forgotten. The cat has only the appearance of attachment ; and it may easily be perceived, by its timid approaches, and side-long looks, that it either dreads its master, or distrusts his kindness : different from the dog, whose caresses are sincere, the cat is assiduous rather for its own pleasure, than to please ; and often gains confidence, only to abuse it. The form of its
body

body, and its temperament, correspond with its disposition; active, cleanly, delicate, and voluptuous, it loves its ease, and seeks the softest cushions to lie on. "Many of its habits, however, are rather the consequences of its formation, than the result of any perverseness in its disposition; it is timid and mistrustful, because its body is weak, and its skin tender; a blow hurts it infinitely more than it does a dog, whose hide is thick and body muscular; the long fur in which the cat is cloathed, entirely disguises its shape, which, if seen naked, is long, feeble, and slender; it is not to be wondered, therefore, that it appears much more fearful of chastisement than the dog, and often flies, even when no correction is intended. Being also the native of the warmer climates, as will be shewn hereafter, it chuses the softest bed to lie on, which is always the warmest."

The cat goes with young fifty-six days, and seldom brings forth above five or six at a time. The female usually hides the place of her retreat from the male, who is often found to devour her kittens. She feeds them for some weeks with her milk, and whatever small animals she can take by surprize, accustoming them betimes to rapine. Before they are a year old, they are fit to engender;
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the female seeks the male with cries ; nor is their copulation performed without great pain, from the narrowness of the passage in the female. They live to about the age of fourteen years ; and, during that period, they are extremely vivacious, suffering to be worried a long time before they die.

The young kittens are very playful and amusing ; but their sport soon turns into malice, and they, from the beginning, shew a disposition to cruelty ; they often look wistfully towards the cage, sit centinels at the mouth of a mouse-hole, and, in a short time, become more expert hunters, than if they had received the instructions of art. Indeed, their disposition is so incapable of constraint, that all instruction would be but thrown away. It is true, that we are told of the Grreek monks of the isle of Cyprus, teaching cats to hunt the serpents with which the island is infested ; but this may be natural to the animal itself, and they might have fallen upon such a pursuit without any instruction. Whatever animal is much weaker than themselves, is to them an indiscriminate object of destruction. Birds, young rabbits, hares, rats and mice, bats, moles, toads and frogs, are all equally pursued ; though not, perhaps, equally acceptable. The mouse seems to be their favourite game ; and, although

though the cat has the sense of smelling in but a mean degree, it, nevertheless, knows those holes in which its prey resides. I have seen one of them patiently watch an whole day until the mouse appeared, and continue quite motionless until it came within reach, and then seized it with a jump. Of all the marks by which the cat discovers its natural malignity, that of playing and sporting with its little captive before killing it outright, is the most flagrant.

The fixed inclination which they discover for this peculiar manner of pursuit, arises from the conformation of their eyes. The pupil in man, and in most other animals, is capable but of a small degree of contraction and dilatation, it enlarges a little in the dark, and contracts when the light pours in upon it, in too great quantities. In the eyes of cats, however, this contraction and dilatation of the pupil, is so considerable, that the pupil, which by day-light appears narrow and small, like the black of ones nail, by night expands over the whole surface of the eye-ball, and, as every one must have seen, their eyes seem on fire. By this peculiar conformation, their eyes see better in darkness than light; and the animal is thus better adapted for spying out and surprizing its prey.

Although

Although the cat is an inhabitant of our houses, yet it cannot properly be called a dependant; although perfectly tame, yet it acknowledges no obedience; on the contrary, it does only just what it thinks fit, and no art can controul any of its inclinations. In general, it is but half tamed; and has its attachments rather to the place in which it resides, than to the inhabitant. If the inhabitant quits the house, the cat still remains; and if carried elsewhere, seems for a while bewildered with its new situation. It must take time to become acquainted with the holes and retreats in which its prey resides, with all the little labyrinths through which they often make good an escape.

The cat is particularly fearful of water, of cold, and ill smells. It loves to keep in the sun, to get near the fire, and to rub itself against those who carry perfumes. It is excessively fond of some plants, such as valerian, marum, and cat-mint: against these it rubs, smells them at a distance, and at last, if they be planted in a garden, wears them out.

This animal eats slowly, and with difficulty, as its teeth are rather made for tearing, than chewing its aliments. For this reason,

reason, it loves the most tender food, particularly fish, which it eats as well boiled as raw. Its sleeping is very light; and it often seems to sleep, the better to deceive its prey. When the cat walks, it treads very softly, and without the least noise; and as to the necessities of nature, it is cleanly to the last degree. Its fur also is usually sleek and glossy; and, for this reason, the hair is easily electrified, sending forth shining sparks, if rubbed in the dark.

“ The wild cat breeds with the tame*; and, therefore, the latter may be considered only as a variety of the former: however, they differ in some particulars; the cat, in its savage state, is somewhat larger than the house-cat; and its fur being longer, gives it a greater appearance than it really has; its head is bigger, and face flatter; the teeth and claws much more formidable; its muscles very strong, as being formed for rapine; the tail is of a moderate length, but very thick and flat, marked with alternate bars of black and white, the end always black; the hips and hind part of the lower joints of the leg, are always black; the fur is very soft and fine: the general colour of these animals, in England, is a yellowish white,

* British Zoology.

mixed with a deep grey. These colours, though they appear at first sight confusedly blended together, yet, on a close inspection, will be found to be disposed like the streaks on the skin of the tiger, pointing from the back downwards, rising from a black list, that runs from the head, along the middle of the back, to the tail. This animal is found in our large woods; and is the most destructive of the carnivorous kinds in this kingdom. It inhabits the most mountainous and woody parts of these islands, living mostly in trees, and feeding only by night. It often happens, that the females of the tame kind go into the woods to seek mates among the wild ones. It should seem, that these, however, are not original inhabitants of this kingdom, but were introduced first in a domestic state, and afterwards became wild in the woods, by ill usage or neglect. Certain it is, the cat was an animal much higher in esteem among our ancestors than it is at present. By the laws of Howel, the price of a kitten, before it could see, was to be a penny; till it caught a mouse, two pence; and, when it commenced mouser, four pence; it was required, besides, that it should be perfect in its senses of hearing and seeing, be a good mouser, have the claws whole, and be a good nurse. If it failed in any of these

these qualities, the seller was to forfeit to the buyer the third part of its value. If any one stole or killed the cat that guarded the prince's granary, he was to forfeit a milch ewe, its fleece and lamb, or as much wheat as, when poured on the cat suspended by the tail (the head touching the floor) would form an heap high enough to cover the tip of the former. From hence we discover, besides a picture of the simplicity of the times, a strong argument that cats were not naturally bred in our forests. An animal that could be so easily taken, could never have been rated so highly; and the precautions laid down to improve the breed, would have been superfluous, in a creature that multiplies to such an amazing degree.

“ In our climate, we know but of one variety of the wild cat; and, from the accounts of travellers, we learn that there are but very few differences in this quadrupede in all parts of the world. The greatest difference, indeed, between the wild and the tame cat, is rather to be found internally than in their outward form. Of all other quadrupedes, the wild cat is, perhaps, that whose intestines are proportionably the smallest and the shortest. The intestines of the sheep, for instance, unravelled out, and measured according to their length will be

found to be above thirty times the length of its body; whereas, the wild cat's intestines, being measured out, will not be found above three times the length of its body. This is a surprizing difference; but we may account for it, from the nature of the food in the two animals; the one living upon vegetables, which require a longer, and a more tedious preparation, before they can become a part of its body; the other, living upon flesh, which requires very little alteration, in order to be assimilated into the substance of the creature that feeds upon it. The one, therefore, wanted a long canal for the properly digesting and straining its food; the other, but a short one, as the food is already prepared to pass the usual secretions: however, a difficulty still remains behind; the intestines of the wild cat are, by one third, shorter than those of the tame. How can we account for this? If we say that the domestic cat, living upon more nourishing and more plentiful provision, has its intestines enlarged to the quantity with which it is supplied, we shall find this observation contradicted in the wild boar and the wolf, whose intestines are as long as those of the hog or the dog, and yet they lead a savage life, and, like the wild cat, are fed by precarious subsistence. The shortness, therefore, of
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the wild cat's intestines, is still unaccounted for; and most naturalists consider the difficulty as inextricable. We must leave it, therefore, as one of those difficulties which future observation or accident are most likely to discover."

This animal is one of those few which are common to the new continent, as well as the old. When Christopher Columbus first discovered that country, an hunter brought him one, which he had discovered in the woods, which was of the ordinary size, the tail very long and thick. They were common also in Peru, although they were not rendered domestic. They are well known also in several parts of Africa, and many parts of Asia. In some of these countries they are of a peculiar colour, and inclining to blue. In Persia, Pietro della Valle informs us, that there is a kind of cat, particularly in the province of Chorazan, of the figure and form of the ordinary one, but infinitely more beautiful in the lustre and colour of its skin. It is of a grey blue, without mixture, and as soft and shining as silk. The tail is very long, and covered with hair six inches long, which the animal throws upon its back, like the squirrel. These cats are well known in France; and have been brought over into England, under the name

of the *blue cat*, which, however, is not their colour.

Another variety of this animal is called by us the *lion cat*; or, as others more properly term it, the Cat of Angora. These are larger than the common cat, and even than the wild one. Their hair is much longer, and hangs about their head and neck, giving this creature the appearance of a lion. Some of these are white, and others of a dun colour. These come from Syria and Persia, two countries which are noted for giving a long soft hair to the animals which are bred in them. The sheep, the goats, the dogs and the rabbits of Syria, are all remarkable for the fine glossy length and softness of their hair; but particularly the cat, whose nature seems to be so inflexible, conforms to the nature of the climate and soil, loses its savage colour, which it preserves almost in every part of the world, and assumes the most beautiful appearance. There are some other varieties in this animal, but rather in colour than in form; and, in general, it may be remarked, that the cat, when carried into other countries, alters but very little, still preserving its natural manners, habits and conformation.

T H E

T H E L I O N.

THE influence of climate upon mankind is very small*; he is found to subsist in all parts of the earth, as well under the frozen poles, as beneath the torrid zone: but in animals, the climate may be considered as congenial, and a kind of second nature. They almost all have their particular latitudes, beyond which they are unable to subsist; either perishing with a moderate cold, or dying for want of a frozen air, even in a temperate climate. The rein-deer is never seen to depart from the icy fields of the north; and, on the contrary, the lion degenerates, when taken from beneath the line. The whole earth is the native country of man; but all inferior animals, have each their own peculiar districts.

Most terrestrial animals are found larger, fiercer, and stronger, in warm than in the cold or temperate climates. They are also more courageous and enterprising; all their dispositions seeming to partake of the ardour of their native soil. The lion, produced

* This description is principally taken from Mr. Buffon: such parts as are added from others, I have marked with inverted commas.

under the burning sun of Africa, is, of all others, the most terrible, the most undaunted. The wolf or the dog, instead of attempting to rival him, scarce deserve to attend his motions, or become his providers. Such, however, of these animals, as are bred in a more temperate climate, towards the tops of cold and lofty mountains, are far more gentle, or, to speak more properly, far less dangerous than those bred in the torrid vallies beneath. The lions of Mount Atlas, the tops of which are covered in eternal snows, have neither the strength nor the ferocity of the lions of Bildulgerid or Zaara, where the plains are covered with burning sands. It is particularly in these frightful deserts, that those enormous and terrible beasts are found, that seem to be the scourge and the terror of the neighbouring kingdoms. Happily, indeed, the species is not very numerous; and it seems to be diminishing daily; for those who have travelled through these countries, assure us, that there are by no means so many there at present, as were known formerly; and Mr. Shaw observes, that the Romans carried fifty times as many lions from Lybia, in one year, to combat in their amphitheatres, as are to be found in the whole country at this time. The same remark is made with re-
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gard to Turkey, to Persia, and the Indies; where the lions are found to diminish in their numbers every day. Nor is it difficult to assign the cause of this diminution: it is obvious that it cannot be owing to the encrease of the force of other quadrupedes, since they are all inferior to the lion, and, consequently, instead of lessening the number, only tend to encrease the supplies on which they subsist; it must, therefore, be occasioned by the encrease of mankind, who is the only animal in nature capable of making head against these tyrants of the forest, and preventing their encrease. The arms even of an Hottentot or a Negroe make them more than a match for this powerful creature; and they seldom make the attack, without coming off victorious. Their usual manner is to find out his retreat, and, with spears headed with iron, to provoke him to the combat: four men are considered as sufficient for this encounter; and he against whom the lion flies, receives him upon his spear, while the others attack him behind; the lion, finding himself wounded in the rear, turns that way, and thus gives the man he first attacked, an opportunity to recover. In this manner they attack him on all sides; until, at last, they entirely disable, and then dispatch him. This superiority in the numbers,

bers, and the arts of man, that are sufficient to conquer the lion, serve also to enervate and discourage him ; for he is brave only in proportion to the success of his former encounters. In the vast desert of Zaara, in the burning sands that lie between Mauritania, and Negroland, in the uninhabited countries that lie to the north of Cafraria, and, in general, in all the deserts of Africa, where man has not fixed his habitation, the lions are found in great numbers, and preserve their natural courage and force. Accustomed to measure their strength with every animal they meet, the habit of conquering renders them intrepid and terrible. Having never experienced the dangerous arts and combinations of man, they have no apprehensions from his power. They boldly face him, and seem to brave the force of his arms. Wounds rather serve to provoke their rage than repress their ardour. They are not daunted even with the opposition of numbers ; a single lion of the desert often attacks an entire caravan ; and, after an obstinate combat, when he finds himself overpowered, instead of flying, he continues to combat, retreating, and still facing the enemy till he dies. On the contrary, the lions which inhabit the peopled countries of Morocco or India, having become acquainted with human power,

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and experienced man's superiority, have lost all their courage, so as to be scared away with a shout; and seldom attack any but the unresisting flocks or herds, which even women and children are sufficient to protect.

This alteration in the lion's disposition sufficiently shews that he might easily be tamed, and admit of a certain degree of education. "In fact, nothing is more common than for the keepers of wild beasts to play with this animal, to pull out his tongue, and even to chastise him without a cause. He seems to bear it all with the utmost composure; and we very rarely have instances of his revenging these unprovoked sallies of impertinent cruelty. However, when his anger is at last excited, the consequences are terrible. Labat tells us of a gentleman who kept a lion in his chamber, and employed a servant to attend it; who, as is usual, mixed his blows with careffes. This ill-judged association continued for some time; till one morning the gentleman was awakened by a noise in his room, which, at first, he could not tell the cause of; but, drawing the curtains, he perceived an horrid spectacle; the lion growling over the man's head, which he had separated from the body, and tossing it round the floor. He immediately,

diately, therefore, flew into the next room, called to the people without, and had the animal secured from doing further mischief." However, this single account is not sufficient to weigh against the many instances we every day see of this creature's gentleness and submission. He is often bred up with other domestic animals, and is seen to play innocently and familiarly among them; and, if it ever happens that his natural ferocity returns, it is seldom exerted against his benefactors. As his passions are strong, and his appetites vehement, one ought not to presume that the impressions of education will always prevail; so that it would be dangerous in such circumstances to suffer him to remain too long without food, or to persist in irritating and abusing him: however, numberless accounts assure us that his anger is noble, his courage magnanimous, and his disposition grateful. He has been often seen to despise contemptible enemies, and pardon their insults when it was in his power to punish them. He has been seen to spare the lives of such as were thrown to be devoured by him, to live peaceably with them, to afford them a part of his subsistence, and sometimes to want food himself rather than deprive them of that life which his generosity had spared.

It may also be said that the lion is not cruel, since he is so only from necessity, and never kills more than he consumes. When satiated, he is perfectly gentle; while the tiger, the wolf, and all the inferior kinds, such as the fox, the pole-cat, and the ferret, kill without remorse, are fierce without cause, and, by their indiscriminate slaughter, seem rather to satisfy their malignity than their hunger.

The outward form of the lion seems to speak his internal generosity. His figure is striking, his look confident and bold, his gait proud, and his voice terrible. His stature is not overgrown, like that of the elephant, or rhinoceros; nor is his shape clumsy like that of the hippopotamos, or the ox. It is compact, well proportioned, and sizeable; a perfect model of strength joined with agility. It is muscular and bold, neither charged with fat or unnecessary flesh. It is sufficient but to see him in order to be assured of his superior force. His large head surrounded with a dreadful mane; all those muscles that appear under the skin swelling with the slightest exertions; and the great breadth of his paws, with the thickness of his limbs, plainly evince that no other animal in the forest is capable of opposing him. He has a very broad face that, as some have imagined, resembles the human. It is surrounded

rounded with very long hair, which gives it a very majestic air. The top of the head, the temples, the cheeks, the under jaw, the neck, the breast, the shoulder, the hinder part of the legs, and the belly, are furnished with it, while all the rest of the body is covered with very short hair, of a tawny colour. "The length of the hair in many parts, and the shortness of it in others, serves a good deal to disguise this animal's real figure. The breast, for instance, appears very broad, but in reality it is as narrow and contracted in proportion as that of the generality of dogs and horses. For the same reason, the tail seems to be of an equal thickness from one end to the other, on account of the inequality of the hair with which it is encompassed; it being shorter near the insertion where the flesh and bones are large, and growing longer in proportion as its real thickness lessens towards the point, where it ends in a tuft. The hair about the neck and the breast is not different from that on the rest of the body, except in the length of it; nor is each hair pointed as in most other animals, but of an equal thickness from one end to the other. The neck is very strong, but not composed of one solid bone, as Aristotle has imagined; on the contrary, though very short and muscular, it

it has as many bones as the camel or the horse; for it is universal to all quadrupedes to have seven joints in the neck; and not one of them have either more or less. However, the muscles in the neck of the lion, that tie the bones together, are extremely strong, and have somewhat the appearance of bones; so that ancient authors, who have treated of this animal, have mistaken the whole for a single bone. The tongue is rough, and beset with prickles as hard as cat's claws; these have the grain turned backwards; so that it is probable a lion, if it should attempt to lick a man's hand, as we are told it sometimes does, would tear off the skin. The eyes are always bright and fiery; nor even in death does this terrible look forsake them. In short, the structure of the paws, teeth, eyes, and tongue, are the same as in a cat; and also in the inward parts these two animals so nearly resemble each other, that the anatomist's chief distinction arises merely from the size."

The lion has, as was observed before, a large mane, which grows every year longer as the animal grows older: the lioness is without this ornament at every age. This mane is not coarse or rough as in a horse, but composed of the same hair with the rest of the body, lengthened, and shining.

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The mane, as well as the rest of the body, is of a yellow colour; nor is there ever any difference to be found in the colour of one lion from that of another. What the ancients might have said concerning black lions, or white, or streaked like the tiger, is not confirmed by modern experience; so that these varieties have never been seen, or exist no longer.

It is usually supposed that the lion is not possessed of the sense of smelling in such perfection as most other animals. It is also observed, that too strong a light greatly incommodes him. This is more than probable from the formation of his eyes, which, like those of the cat, seem fitted for seeing best in the dark. For this reason, he seldom appears in open day, but ravages chiefly by night; and not only the lion, but all other animals of the cat kind, are kept off by the fires which the inhabitants light to preserve their herds and flocks; the brightness of the flame dazzles their eyes, which are only fitted for seeing in the dark; and they are afraid to venture blindly into those places which they know to be filled with their enemies. “It is equally true of all this kind, that they hunt rather by the sight than the smell; and it sometimes happens that the lion pursues either the jackall or the wild dog.

dog, while they are hunting upon the scent; and, when they have run the beast down, he comes in and monopolizes the spoil. From hence, probably, may have arisen the story of the lion's provider: these little industrious animals may often, it is true, provide a feast for the lion; but they have hunted merely for themselves, and he is an unwelcome intruder upon the fruits of their toil."

The lion, when hungry, boldly attacks all animals that come in his way; but, as he is very formidable, and as they all seek to avoid him, he is often obliged to hide, in order to take them by surprise. For this purpose he crouches on his belly, in some thicket, or among the long grass, which is found in many parts of the forest; in this retreat he continues, with patient expectation, until his prey comes within a proper distance, and he then springs after it, fifteen or twenty feet from him, and often seizes it at the first bound. If he misses the effort, and in two or three reiterated springs cannot seize his prey, he continues motionless for a time, seems to be very sensible of his disappointment, and waits for a more successful opportunity. In the deserts and forest, his most usual prey are the gazelles
and

and the monkeys, with which the torrid regions abound. The latter he takes when they happen to be upon the ground, for he cannot climb trees like the cat or the tiger. He devours a great deal at a time, and generally fills himself for two or three days to come. His teeth are so strong that he very easily breaks the bones, and swallows them with the rest of the body. It is reported that he sustains hunger a very long time, but thirst he cannot support in an equal degree, his temperament being extremely hot; some have even asserted that he is in a continual fever. He drinks as often as he meets with water, lapping it like a cat; which, as we know, drinks but slowly. He generally requires about fifteen pounds of raw flesh in a day; he prefers that of live animals, and particularly those which he has just killed. He seldom devours the bodies of animals when they begin to putrify; and he chuses rather to hunt for a fresh spoil than to return to that which he had half devoured before. However, though he usually feeds upon fresh provisions, his breath is very offensive, and his urine insupportable.

The roaring of the lion is so loud, that when it is heard in the night, and re-echoed by the mountains, it resembles distant thunder.

der. This roar is his natural note ; for when enraged he has a different growl, which is short, broken, and reiterated. The roar is a deep hollow growl, which he sends forth five or six times a day, particularly before rains. The cry of anger is much louder and more formidable. This is always excited by opposition ; and upon those occasions, when the lions summons up all his terrors for the combat, nothing can be more terrible. He then lashes his sides with his long tail, which alone is strong enough to lay a man level. He moves his mane in every direction ; it seems to rise and stand like bristles round his head ; the skin and muscles of his face are all in agitation ; his huge eye-brows half cover his glaring eyeballs ; he discovers his teeth, which are formed rather for destruction than chewing his food ; he shews his tongue covered with points, and extends his claws, which appear almost as long as a man's fingers. Prepared in this manner for war, there are few animals that will venture to engage him ; and even the boldest of the human kind are daunted at his approach. The elephant, the rhinoceros, the tiger, and the hippopotamos, are the only animals that are not afraid singly to make opposition.

“ Nevertheless, neither the leopard nor the wild boar, if provoked, will shun the combat ; they do not seek the lion to attack, but will not fly at his approach ; they wait his onset, which he seldom makes unless compelled by hunger ; they then exert all their strength, and are sometimes successful. We are told of the combat of a lion and a wild boar, in a meadow near Algiers, which continued for a long time with incredible obstinacy. At last, both were seen to fall by the wounds they had given each other ; and the ground all about them was covered with their blood. These instances however are very rare, for the lion is in general the undisputed master of the forest. Man is the only creature that attacks him with almost certain success ; with the assistance of dogs and horses, which are trained to the pursuit. These animals that, in a state of nature, would have fled from the presence of the lion, in an agony of consternation, when conscious of the assistance of man, become pursuers in turn, and boldly hunt their natural tyrant. The dogs are always of the large breed ; and the horses themselves, as Gasner assures us, must be of that sort called Charossi, or lion eyed, all others of this kind flying at the sight of the lion,

lion, and endeavouring to throw their riders. When the lion is roused, he recedes with a slow proud motion; he never goes off directly forward, nor measures his paces equally, but takes an oblique course, going from one side to the other, and bounding rather than running. When the hunters approach him, they either shoot or throw their javelins; and in this manner disable him before he is attacked by the dogs, many of whom he would otherwise destroy. He is very vivacious, and is never killed at once, but continues to fight desperately even after he has received his mortal blow. He is also taken by pit-falls; the natives digging a deep hole in the ground, and covering it slightly over with sticks and earth; which, however, give way beneath his weight, and he sinks to the bottom, from whence he has no means of escape. But the most usual manner of taking this animal is while yet a cub, and incapable of resistance. The place near the den of the lioness is generally well known by the greatness of her depredations on that occasion; the natives, therefore, watch the time of her absence, and, aided by a swift horse, carry off her cubs; which they sell to strangers, or to the great men of their country."

The lion, while young and active, lives by hunting in the forest at the greatest distance from any human habitation; and seldom quits this retreat while able to subsist by his natural industry; but when he becomes old and unfit for the purpose of surprize, he, boldly comes down into places more frequented, attacks the flocks and herds that take shelter near the habitation of the shepherd or the husbandman, and depends rather upon his courage than his address for support. It is remarkable, however, that when he makes one of these desperate sallies, if he finds men and quadrupedes in the same field, he only attacks the latter, and never meddles with men, unless they provoke him to engage. It is observed that he prefers the flesh of camels to any other food; he is likewise said to be fond of that of young elephants; these he often attacks before their trunk is yet grown; and, unless the old elephant comes to their assistance, he makes them an easy prey.

The lion is terrible upon all occasions, but particularly at those seasons when he is incited by desire, or when the female has brought forth. It is then that the lioness is seen followed by eight or ten males, who fight most bloody battles among each other, till one of them becomes victorious over
all

the rest. She is said to bring forth in spring, and to produce but once a year. "With respect to the time of gestation, naturalists have been divided, some asserting that the lioness went with young six months, and others but two. The time also of their growth and their age have hitherto been left in obscurity; some asserting that they acquired the full growth in three years, and others that they required a longer period to come to perfection; some saying (and among this number is Mr. Buffon) that they lived to but twenty, or twenty-two years at most; others making their lives even of shorter duration. All these doubts are now reduced to certainty; for we have had several of these animals bred in the Tower; so that the manner of their copulation, the time of their gestation, the number they bring forth, and the time they take to come to perfection, are all pretty well known. Although the lion emits his urine backwards, yet he couples in the ordinary manner; and, as was said before, his internal structure in almost every respect resembles that of a cat. The lioness, however, is upon these occasions particularly fierce, and often wounds the lion in a terrible manner. She goes with young, as I am assured by her keeper,

keeper, no more than five months; the young ones, which are never more than two in number when brought forth, are about the size of a large pug dog, harmless, pretty, and playful; they continue the teat for twelve months, and the animal is more than five years in coming to perfection. As to its age, from its imprisoned state, we can have no certainty; since it is very probable that, being deprived of its natural climate, food, and exercise, its life must be very much abridged. However, naturalists have hitherto been greatly mistaken as to the length of its existence. The great he-lion, called Pompey, which died in the year 1760, was known to have been in the Tower for above seventy years; and one lately died there, which was brought from the river Gambia, that died above sixty-three. The lion, therefore, is a very long-lived animal; and, very probably, in his native forests, his age exceeds that of man himself."

In this animal, all the passions, even of the most gentle kind, are in excess, but particularly the attachment of the female to her young. The lioness, though naturally less strong, less courageous, and less mischievous than the lion, becomes terrible when she has got young ones to provide

vide for. She then makes her incursions with even more intrepidity than the lion himself; she throws herself indiscriminately among men and other animals; destroys without distinction; loads herself with the spoil, and brings it home reaking to her cubs; whom she accustoms betimes to cruelty and slaughter. She usually brings forth in the most retired and inaccessible places; and when she fears to have her retreat discovered, often hides her tracks, by running back her ground, or by brushing them out with her tail. She sometimes also, when her apprehensions are great, transports them from one place to another; and, if obstructed, defends them with determined courage, and fights to the last.

The lion is chiefly an inhabitant of the torrid zone; and, as was said, is always most formidable there: nevertheless, he can subsist in more temperate climates; and there was a time when even the southern parts of Europe were infested by him. At present he is only found in Africa and the East-Indies; in some of which countries he grows to an enormous height. The lion of Bildulgerid is said to be nearly five feet high, and between nine and ten feet from the tip of the nose to the insertion of the tail.

We

We have in the Tower, at present, one of above four feet high, that was brought from Morocco, which is the largest that for some time past has been seen in Europe. The ordinary size is between three and four feet; the female being in all her dimensions about one third less than the male. There are no lions in America; the Puma, which has received the name of the American Lion, is, when compared, a very contemptible animal, having neither the shape, the size, nor the mane of the lion; being known to be extremely cowardly, to climb trees for its prey, to subsist rather by its cunning than its courage, and to be inferior even to the animal that goes by the name of the American Tiger. We ought not, therefore, to confound this little treacherous creature with the lion, which all the ancients have concurred in denominating the king of beasts, and which they have described as brave and merciful. “ Indeed, the numerous accounts which they have given us of this animal’s generosity and tenderness, shew that there must be some foundation for the general belief of its good qualities; for mankind seldom err when they are all found to unite in the same story. However, perhaps, the caution of Aristophanes, the comic poet,

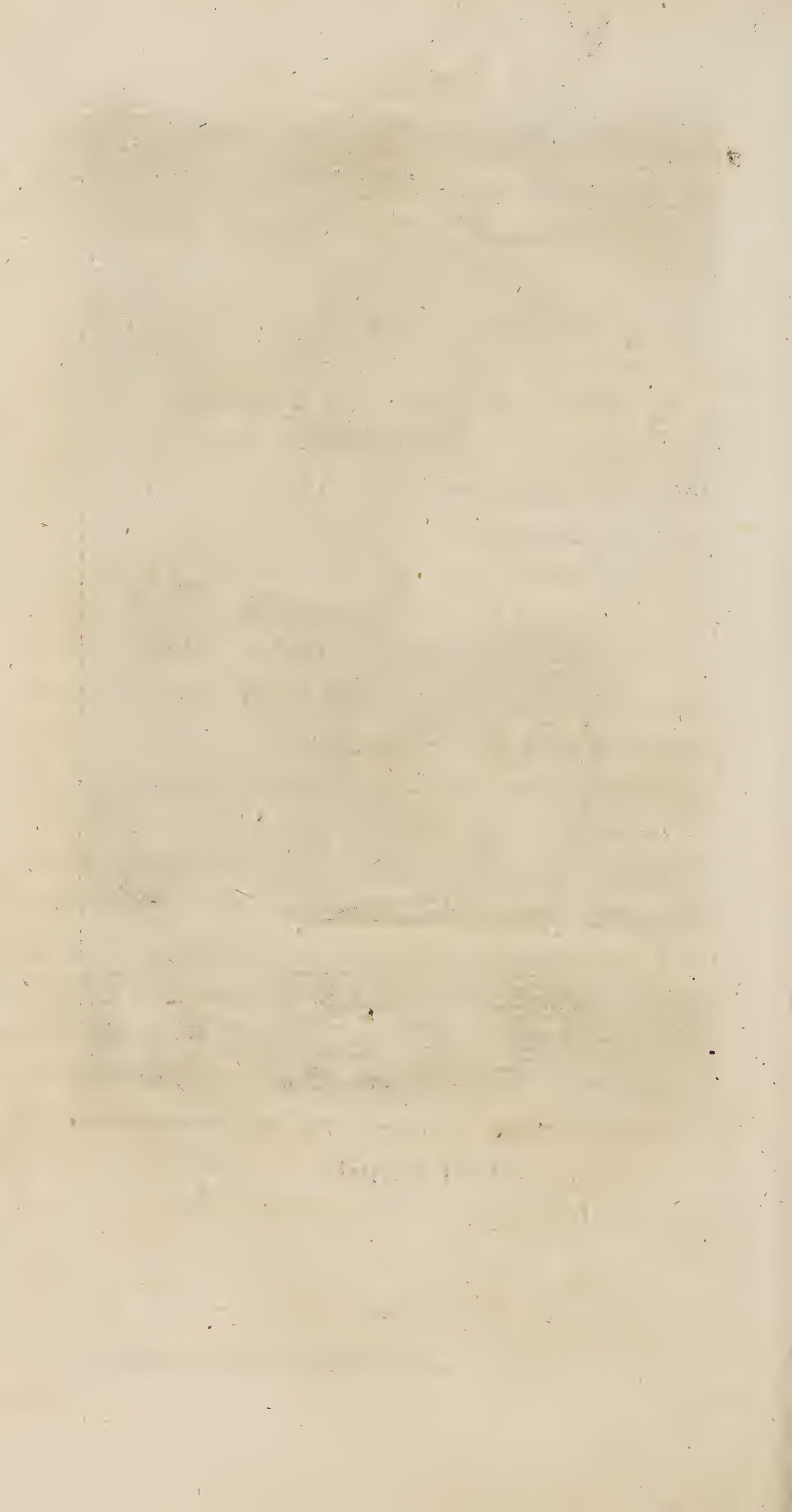
is



De Sève del.

J. N. Lodge sculp.

The Lyones's.



is better followed in practice, who advises us to have nothing to do with this creature, but to let the lionsess suckle her own whelps*.

T H E T I G E R.

“THE antients had a saying, *That as the peacock is the most beautiful among birds, so is the tiger among quadrupedes**. In fact, no quadrupede can be more beautiful than this animal; the glossy smoothness of his hair, which lies much smoother, and shines with greater brightness than even that of the leopard; the extreme blackness of the streaks with which he is marked, and the bright yellow colour of the ground which they diversify, at once strike the beholder. To this beauty of colouring is added an extremely elegant form, much larger indeed than that of the leopard, but more slender, more delicate, and bespeaking the most extreme swiftness and agility. Unhappily, however, this animal's disposition is as mischievous as its form is admirable, as if Providence was willing to shew the small value of beauty, by bestowing it on the most noxious of qua-

* Tantem autem præstat pulchritudine tygris inter alius feras quantum inter volucres pavo.

* Οὐ χρη λεοντος σκυμνον εν πολει τρεφειν.

drupedes. We have, at present, one of these animals in the Tower, which to the view appears the most good natured and harmless creature in the world : its physiognomy is far from fierce or angry ; it has not the commanding stern countenance of the lion, but a gentle placid air ; yet for all this it is fierce and savage beyond measure ; neither correction can terrify it, nor indulgence can tame.”

The chief and most observable distinction in the tiger, and in which it differs from all others of the mottled kind, is in the shape of its colours, which run in streaks or bands in the same direction as his ribs from the back down to the belly. The leopard, the panther, and the ounce, are all partly covered like this animal, but with this difference, that their colours are broken in spots all over the body ; whereas in the tiger they stretch lengthwise, and there is scarce a round spot to be found on his skin. Besides this there are other observable distinctions : the tiger is much larger, and often found bigger even than the lion himself : it is much slenderer also in proportion to its size ; its legs shorter, and its neck and body longer. In short, of all other animals, it most resembles the cat in shape ; and, if we conceive the
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latter magnified to a very great degree, we shall have a tolerable idea of the former.

In classing carnivorous animals, we may place the lion foremost^{*}; and immediately after him follows the tiger, which seems to partake of all the noxious qualities of the lion without sharing any of his good ones. To pride, courage, and strength, the lion joins greatness, clemency, and generosity; but the tiger is fierce without provocation, and cruel without necessity. The lion seldom ravages except when excited by hunger; the tiger, on the contrary, though glutted with slaughter, is not satisfied, still continues the carnage, and seems to have its courage only enflamed by not finding resistance. In falling in among a flock or a herd, it gives no quarter, but levels all with indiscriminate cruelty, and scarce finds time to appease its appetite while intent upon satisfying the malignity of its nature. It thus becomes the scourge of the country where it is found; it fears neither the threats nor the opposition of mankind; the beasts both wild and tame fall equally a sacrifice to its insatiable fury; the young elephant and the rhinoceros be-

^{*} The remainder of this description is taken from Mr. Buffon, except where marked with inverted commas.

come equally its prey, and it not unfrequently ventures to attack the lion himself.

Happily for the rest of nature, this animal is not common, and the species is chiefly confined to the warmest provinces of the east. The tiger is found in Malabar, in Siam, in Bengal, and in all the same countries which are inhabited by the elephant or the rhinoceros. Some even, pretend that it has a friendship for, and often accompanies the latter, in order to devour its excrements, which serve it as a purge. Be this as it will, there is no doubt but that they are often seen together at the sides of lakes and rivers; where they are probably both compelled to go by the thirst which in that torrid climate they must very often endure. It is likely enough also that they seldom make war upon each other, the rhinoceros being a peaceable animal, and the tiger knowing its strength too well to venture the engagement. It is still more likely that the tiger finds this a very convenient situation, since it can there surprise a greater number of animals, which are compelled thither from the same motives. In fact, it is generally known to lurk near such places where it has an opportunity of choosing its prey, or rather of multiplying its massacres. When it has killed one it
often

often goes to destroy others, swallowing their blood at large draughts, and seeming rather glutted than fatiated with its abundance.

However, when it has killed a large animal, such as an horse, or a buffalo, it immediately begins to devour it on the spot, fearing to be disturbed. In order to feast at its ease, it carries off its prey to the forest, dragging it along with such ease, that the swiftness of its motion seems scarce retarded by the enormous load it sustains. From this alone we may judge of its strength; but, to have a more just idea of this particular, let us stop a moment to consider the dimensions of this most formidable creature. Some travellers have compared it for size to an horse, and others to a buffalo, while others have contented themselves with saying that it was much larger than a lion. We have recent accounts of this animal's magnitude that deserve the utmost confidence. Mr. Buffon has been assured by one of his friends that he saw a tiger, in the East Indies, of fifteen feet long. "Supposing that he means including the tail, this animal allowing four feet for that, must have been eleven feet from the tip of the nose to the insertion of the tail. Indeed, that which is now in the Tower is not so large, being as well as I could measure six feet from the tip

tip to the insertion, and the tail was three feet more. Like all the rest of its kind, its motions are irregular and defaltory; it bounds rather than runs; and like them rather chuses to take its prey by surprize than to be at the trouble of hunting it down." How large a leap it can take at once we may easily judge, by comparing what it might do to what we see so small an animal as the cat actually perform. The cat can leap several feet at a bound; and the tiger, who is ten times as long, can no doubt spring proportionably.

"The tiger is the only animal whose spirit seems untameable. Neither force nor constraint, neither violence nor flattery, can prevail in the least on its stubborn nature. The careffes of the keeper have no influence on their heart of iron; and time, instead of mollifying its disposition, only serves to encrease its fierceness and malignity. The tiger snaps at the hand that feeds it as well as that by which it is chastised; every object seems considered only as its proper prey, which it devours with a look; and although confined by bars and chains, still makes fruitless efforts, as if to shew its malignity when incapable of exerting its force."

To give a still more complete idea of the strength of this terrible creature, we shall quote a passage from Father Tachard, who was an eye-witness of a combat between a tiger and two elephants at Siam. For this purpose, the king ordered a lofty palisade to be built of bambou cane, about an hundred feet square; and in the midst of this were three elephants appointed for combating the tiger. Their heads and a part of their trunk was covered with a kind of armour, like a mask, which defended that part from the assaults of the fierce animal with which they were to engage. As soon, says this author, as we were arrived at the place, a tiger was brought forth from his den, of a size much larger than we had ever seen before. It was not at first let loose, but held with chords, so that one of the elephants approaching, gave it three or four terrible blows, with its trunk, on the back, with such force, that the tiger was for some time, stunned, and lay without motion, as if it had been dead. However, as soon as it was let loose, and at full liberty, although the first blows had greatly abated its fury, it made at the elephant with a loud shriek, and aimed at seizing his trunk. But the elephant, wrinkling it up with great dexterity, received the tiger on his great teeth, and tossed it up
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into the air. This so discouraged the furious animal, that it no more ventured to approach the elephant, but made several circuits round the palifade, often attempting to fly at the spectators. Shortly after, three elephants were sent against it, and they continued to strike it so terribly with their trunks, that it once more lay for dead; and they would certainly have killed it, had not there been a stop put to the combat.

From this account, we may readily judge of the strength of this animal, which, though reduced to captivity, and held by chords, though first disabled, and set alone against three, yet ventured to continue the engagement, and even that against animals covered and protected from its fury.

“ Captain Hamilton informs us, that in the Sundah Rajha’s dominions there are three sorts of tigers in the woods, and that the smallest are the fiercest. This is not above two feet high, appears to be extremely cunning, and delights in human flesh. The second kind is about three feet high, and hunts deer and wild hogs, besides the little animal which has been already described, under the name of the Chevrotain, or Guinea deer. The tiger of the largest sort, is above three feet and an half high; but, although endued with greater powers, is, by no means,
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so rapacious as either of the former. This formidable animal, which is called the Royal Tiger (one of which we have at present in the Tower) does not seem so ravenous nor so dangerous, and is even more cowardly. A peasant in that country, as this traveller informs us, had a buffalo fallen into a quagmire, and, while he went for assistance, there came a large tiger, that, with its single strength, drew forth the animal, which the united force of many men could not effect. When the people returned to the place, the first object they beheld was the tiger, who had thrown the buffalo over its shoulder, as a fox does a goose, and was carrying it away, with the feet upward, towards its den; however, as soon as it saw the men, it let fall its prey, and instantly fled to the woods: but it had previously killed the buffalo, and sucked its blood; and, no doubt, the people were very well satisfied with its retreat. It may be observed, that some East-Indian buffaloes weigh above a thousand pounds, which is twice as heavy as the ordinary run of our black cattle; so that from hence we may form a conception of the enormous strength of this rapacious animal, that could thus run off with a weight at least twice as great as that of itself.

“ Were this animal as common as the panther, or even as the lion himself, thus furnished as it is with the power to destroy, and the appetite for slaughter, the country would be uninhabitable where it resides. But luckily the species is extremely scarce; and has been so since the earliest accounts we have had of the tiger. About the times of Augustus, we are assured by Pliny*, that when panthers were brought to Rome by hundreds, a single tiger was considered as an extraordinary sight; and he tells us, that the emperor Claudius was able to procure four only; which shews how difficultly they were procured. The incredible fierceness of this animal may be, in some measure, the cause of the scarcity which was then at Rome, since it was the opinion of Varro, that the tiger was never taken alive†: but its being a native only of the East-Indies, and that particularly of the warmer regions, it is not to be wondered that the species should be so few.”

We may, therefore, consider the species of the true streaked tiger, as one of the scarcest of animals, and much less diffused than that of the lion. As to the number of its young,

* Plin. Hist. Nat. lib. viii. c. 17.

† Tigris vivus capi ad huc non potuit Var. de ling. Lat.

we have no certain accounts; however, it is said, that it brings forth four or five at a time. Although furious at all times, the female, upon this occasion, exceeds her usual rapacity; and, if her young are taken from her, she pursues the spoiler with incredible rage; he, to save a part, is contented to lose a part, and drops one of her cubs, with which she immediately returns to her den, and again pursues him; he then drops another, and by the time she has returned with that, he generally escapes with the remainder. If she loses her young entirely, she then becomes desperate, boldly approaches even the towns themselves, and commits incredible slaughter. The tiger expresses its resentment in the same manner with the lion; it moves the muscles and skin of its face, shews its teeth, and shrieks in the most frightful manner. Its note is very different from that of the lion; being rather a scream than a roar: and the ancients expressed it very well when they said that, *tigrides indomitæ rancant rugiuntque leones*.

The skin of these animals is much esteemed all over the east, particularly in China; the Mandarines cover their seats of justice in the public places with it, and convert it into coverings for cushions in winter. In Europe, these skins, though but seldom to be

met with, are of no great value, those of the panther and the leopard being held in much greater estimation. This is all the little benefit we derive from this dreadful animal, of which so many falsehoods have been reported; as, that its sweat was poisonous, and the hair of its whiskers more dangerous than an envenomed arrow. But the real mischiefs which the tiger occasions while living are sufficient, without giving imaginary ones to the parts of its body when dead. In fact, the Indians sometimes eat its flesh, and find it neither disagreeable nor unwholesome.

There is an animal of America, which is usually called the Red Tiger, but Mr. Buffon calls it the Cougar, which, no doubt, is very different from the tiger of the east. Some, however, have thought proper to rank both together; and I will take leave to follow their example, merely because the cougar is more like a tiger in every thing, except the colour, than any other animal I know; having the head, the body and the neck, shaped very much in the same manner. Of these slight differences, words would give but a very faint idea; it will be, therefore, sufficient to observe, that they are both equally slender, and are smaller where the neck joins the head, than others of the panther kind. There is one at present



De Sève del.

Jr. Lodge sculp.

The Cougar.

present in the Tower; and it seemed to me, as well as I could see it through the bars, that were it properly streaked and coloured, it would in all things resemble a small tiger. It is, however, of a very different colour, being of a deep brown, and the tail very long and pointed. It is rather darker on the back; under the chin it is a little whitish, as also on the lower part of the belly.

Of all the American animals, this is the most formidable and mischievous; even their pretended lion not excepted. It is said, there are several sorts of them; and, as well as I can remember, I have seen one or two here in England, both differing from the present, in size and conformation. It is, indeed, a vain endeavour to attempt to describe all the less obvious varieties in the cat kind. If we examine them minutely, we shall find the differences multiply upon us so much, that, instead of an history, we shall only be paid with a catalogue of distinctions. From such of them as I have seen, within these last six years, I think I could add two animals of this species, that have not been hitherto described, and with the names of which he that shewed them was utterly unacquainted. But it is a poor ambition, that of being eager to find out new distinctions,

distinctions, or adding one noxious animal more, to a list that is already sufficiently numerous. Were the knowing a new variety to open an unknown history, or in the least to extend our knowledge, the enquiry would be then worth pursuing; but what signifies mentioning some trifling difference, and from thence becoming authors of a new name, when the difference might have originally proceeded either from climate, soil, or indiscriminate copulation?

The cougars are extremely common in South America, and, where the towns border upon the forest, these make frequent incursions by night into the midst of the streets, carrying off fowls, dogs, and other domestic creatures. They are, however, but weak and contemptible, compared to the great tiger, being found unable to cope with a single man. The Negroes and Indians are very dextrous in encountering them; and some, even for the sake of their skins, seek them in their retreats. The arms in this combat seemingly so dangerous, are only a lance of two or three yards long, made of heavy wood, with the point hardened in the fire; and a kind of scymitar, of about three quarters of a yard in length. Thus armed, they wait till the tiger makes an assault against the left hand, which holds the lance, and

and is wrapped up in a short cloak of baize. Sometimes the animal, aware of the danger, seems to decline the combat; but then its antagonist provokes it with a slight touch of the lance, in order, while he is defending himself, to strike a sure blow. As soon, therefore, as the creature feels the lance, it grasps it with one of its paws, and with the other strikes at the arm which holds it. Then it is that the person nimbly aims a blow with his scymetar, which he kept concealed, with the other hand, and hamstringing the creature, which immediately draws back enraged, but instantly returns to the charge. But then, receiving another stroke, it is totally deprived of the power of motion: and the combatant, killing it at his leisure, strips the skin, cuts off the head, and returns to his companions, displaying these as the trophies of his victory.

This animal, as we are assured, is often more successful against the crocodile; and it is the only quadrupede in that part of the world, that is not afraid of the engagement. It must be no unpleasant sight to observe, from a place of safety, this extraordinary combat, between animals so terrible and obnoxious to man. Such as have seen it, describe it in the following manner. When the tiger, impelled by thirst, that seems continually

continually to consume it, comes down to the river side to drink, the crocodile, which makes no distinction in its prey, lifts its head above water to seize it; the tiger, not less rapacious than the other, and unacquainted with the force of the enemy, boldly ventures to seize it, and plunges its claws into the eyes of the crocodile, which is the only vulnerable part of its body: upon this the crocodile instantly dives under water, and the tiger goes down with him, for it will sooner die than let go its hold. In this manner the combat continues for some time, until the tiger is drowned, or escapes, as is sometimes the case, from its disabled enemy.

These animals are common in Guiana*. They were formerly seen swimming over, in great numbers, into the island of Cayenne, to attack and ravage the flocks and herds of the inhabitants. In the beginning, they were a terrible scourge to the infant colony; but, by degrees, they were repulsed and destroyed, and are now seen no longer at that place. They are found in Brazil, in Paraguay, in the country of the Amazons, and in several other parts of South America. They often climb trees in quest of prey, or to

* Buffon, vol. xix. p. 22.



De Sève del.

Jm. Lodge sculp.

The Tiger.

avoid their pursuers. They are deterred by fire, like all other animals of the cat kind; or, more properly speaking, they seldom venture near those places where they see it kindled, as they are always sure of their enemies being near, and their nocturnal eyes are dazzled by the brightness of the blaze. From the description of this animal, one would be hardly led to suppose, that its flesh was good for food; and yet we have several accounts which alledge the fact, some asserting it to be superior even to mutton: however, what Monsieur Des Marchais observes, is most likely to be true; namely, that the most valuable part of this animal is its skin, and that its flesh is but indifferent eating, being generally lean, and usually having a strong fumet.

THE PANTHER, AND THE LEOPARD.

WE have hitherto found no great difficulty in distinguishing one animal from another, each carrying its own peculiar marks, which, in some measure, serve to separate it from all the rest. But it is otherwise, when we come to these of the cat kind, that fill up the chasm between the tiger and the cat. The spots with which their skins are diversified, are so various, and their size so equivocal, that

that it is no easy matter to distinguish the species, particularly as we have little else but the spots and the size to guide us in making the distinction. If we regard the figure and diversity of the spots, we shall find many varieties not taken notice of by any naturalist; if we are led by the size, we shall find an imperceptible gradation from the cat to the tiger. It would be vain, therefore, to make as many varieties in these animals as we see differences in spots or stature; it will be sufficient to seize the most general distinctions, and leave the rest to such as are fond of more minute disquisitions.

Of all this tribe, whose skins are so beautifully spotted, and whose natures are so mischievous, the Panther may be considered as the foremost. This animal has been by many naturalists mistaken for the tiger; and, in fact, it approaches next to it in size, fierceness and beauty. It is distinguished, however, by one obvious and leading character; that of being spotted, not streaked; for, in this particular, the tiger differs from the panther, the leopard, and almost all the inferior ranks of this mischievous family.

This animal, which Mr. Buffon calls simply the Panther, Linnæus the Pard, Gesner the Pardalis, and the modern Latins the
 Leopardus;

Leopardus; this animal, I say, which goes by too many names, and which the English have indiscriminately called by the name of the panther or the leopard, may be considered as the largest of the kind, and is spotted in a manner somewhat different from those that are smaller. As those spots, however, make the principal difference between it and the lesser animals, which it otherwise resembles in shape, size, disposition, and beauty, I will first shew those slight distinctions, and mention the names each animal has received in consequence thereof: and then proceed to give their history together, still marking any peculiarity observable in one of the species, which is not found in the rest.

Next to the great panther, already mentioned, is the animal which Mr. Buffon calls the Leopard, a name which he acknowledges to be given arbitrarily, for the sake of distinction. Other naturalists have not much attended to the slight differences between this and the great panther, nor have they considered its discriminations as sufficient to entitle it to another name. It has hitherto, therefore, gone under the name of the Leopard, or Panther of Senegal, where it is chiefly found. The differences between this animal and the former are these: the large
panther

panther is often found to be six feet long, from the tip of the nose to the insertion of the tail; the panther of Senegal is not above four. The large panther is marked with spots in the manner of a rose, that is, five or six make a kind of circle, and there is generally a large one in the middle. The leopard of Senegal has a much more beautiful coat, the yellow is more brilliant, and the spots are smaller, and not disposed in rings but in clusters. As to the rest, they are both whiteish under the belly; the tail in both is pretty long, but rather longer in proportion in the latter, than the former. To these two animals, whose differences seem to be so very minute, we may add a third; namely, the *Jaguar* or Panther of America. This, in every respect, resembles the two former, except in the disposition of its spots, and that its neck and head are rather streaked than spotted. The jaguar is also said to be lower upon its legs, and less than the leopard of Senegal. These three quadrupedes, as we see, have but very slight differences, and the principal distinction used by Mr. Buffon, is taken from the size; the first, as he says, is usually six feet long; the second, four feet; and the last, about three: however, it appears from the particular subjects of his description, that the panther in his possession was not above three feet seven inches



De Seve del.

Jr^o Lodge sculp.

The Male Panther.

inches long; that the leopard's skin which he describes, was about four; and that the jaguar, at two years old, was between two and three feet long, which, when come to its full growth, would, no doubt, be four feet long, as well as the two former. From hence, therefore, we may conclude, that the size in these animals is not sufficient to make a distinction among them; and that those who called them all three by the indiscriminate names of the leopard and the panther, if not right, were at least excuseable. Of those which are now to be seen in the Tower, the jaguar, or the American panther, is rather the largest of the three; and is by no means the contemptible animal which Mr. Buffon describes it to be: the leopard is the least of them, and has, by some travellers, been supposed to be an animal produced between the panther and the ounce, an animal which resembles, but is less than any of the former. These three animals we may, therefore, rank together, as they agree pretty nearly in their robe, their size, their dispositions and their ferocity.

We come next to the animal confessedly different from any of the former, being much smaller, and its colour more inclining to white. Its name, however, in our language, has caused no small confusion. It has been generally

generally called by foreigners, the Onza, or the Ounce, and this name some of our own writers have thought proper to give it; but others of them, and those the most celebrated, such as Willoughby, have given this name to a different animal, with a short tail, and known to the ancients and moderns by the name of the Lynx. I confess myself at a loss, in this case, whom to follow; the alteration of names should be always made with great caution, and never but in cases of necessity. If we follow Willoughby, there will be an animal of the panther kind, very distinguishable from all the rest, left without a name; and if we recede from him, it will serve to produce some confusion among all the numerous class of readers and writers who have taken him for their guide: however, as he seems himself to have been an innovator, the name of the lynx having been long adopted into our language before, it was unnecessary to give the animal that bore it another name, and to call that creature an ounce, which our old writers had been accustomed to know by the Latin appellation, for this reason, therefore, we may safely venture to take a name that has been long misapplied, from the lynx, and restore it to the animal in question. We will, therefore, call that animal of the panther kind,



De Sève del.

Jn^o Lodge sculp.

The Lynx.

kind, which is less than the panther, and with a longer tail, the ounce; and the lynx may remain in possession of that name by which it was known among all our old English writers, as well as by all antiquity.

The Ounce, or the *Onca* of Linnæus, is much less than the panther, being not, at most, above three feet and a half long: however, its hair is much longer than that of the panther, and its tail still more so. The panther of four or five feet long, has a tail but of two feet, or two feet and an half. The ounce, which is but about three feet, has a tail often longer than the rest of its body. The colour of the ounce is also apparently different, being rather more inclining to a cream colour, which is deeper on the back, and whiter towards the belly. The hair on the back is an inch and an half long; that on the belly, two inches and an half, which is much longer than that of the panther. Its spots are disposed pretty much in the same manner as the large panther, except that on the haunches it is rather marked with stripes than with spots.

Descending to animals of this kind that are still smaller, we find the Catamountain, which is the *Ocelot* of Mr. Buffon, or the *Tiger Cat* of most of those who exhibit it as a show. It is less than the ounce,
but

but its robe more beautifully variegated. It is an American animal, and is about two feet and an half in length, from the nose to the infertion of the tail. It is extremely like a cat, except that it is larger and slenderer, its colours are more beautiful, and its tail rather shorter. The fur is of a reddish colour, the whole beautified with black spots, and streaks of different figures. They are long on the back, and round on the belly and paws. On the ears are black stripes, which run across; but, in other respects, they entirely resemble those of a cat. These colours, however, which naturalists have taken great pains minutely to describe, are by no means permanent, being differently disposed in different animals of the same species. I remember to have seen an animal of this size, but whether of this species I will not pretend to say, some years ago, that was entirely brown, and was said also to have come from America.

From this tribe of the cat kind with spotted skins and a long tail, we come to another, with skins diversified in like manner, but with a shorter tail. The principal of these is the Lynx, the name by which the animal was known to Ælian, among the ancients; and to all our old English writers, among those of a more modern date.

date. This name has been corrupted by the Portuguese into the word *Ouze*; and this corruption has been adopted by Ray, who has improperly called this animal the *Ounce*, after some of the foreign travellers. The first striking distinction between the lynx, and all those of the panther kind, is in its tail, which is at least half as short in proportion, and black at the extremity. Its fur is much longer, the spots on the skin less vivid, and but confusedly mingled with the rest. Its ears are much longer, and tipped at the points with a black tuft of hair. The colour round the eyes is white, and the physiognomy more placid and gentle. Each hair of this animal is of three different colours: the root is of a greyish brown; the middle red, or of an ash colour; and the ends white. This whiteness at the ends takes up so small a part of the particular hair, that it does not prevent us from seeing the principal colour, which is that of the middle part; so that it only makes the surface of the body appear as if it was silvered over: however, the hair of which the spots consist, has no white at the ends, and at the roots it is not quite so black as the other part. This animal is not above the size of the ounce, but is rather

stronger built, and it has but twenty-eight teeth ; whereas all the rest of the cat kind already mentioned have thirty.

Another animal of this kind is called the Siagush, or, as Mr. Buffon names it, the Caracal. It is a native of the East-Indies, and resembles the lynx in size, in form, and even in the singularity of being tufted at the tips of the ears. However, the siagush differs in not being mottled as the lynx is ; its fur, or rather hair, is rougher and shorter ; its tail is rather longer ; its muzzle more lengthened ; its physiognomy more fierce, and its nature more savage.

The third, and last animal that need be mentioned of this kind, is that which Mr. Buffon calls the Serval, and which he has first described. It is a native of Malabar, resembling the panther in its spots, but the lynx in the shortness of its tail, in its size, and in its strong built form.

These seem to be all the principal distinctions among animals of the panther kind, from the largest of this tribe down to the domestic cat, which is the smallest of all these fierce and mischievous varieties. In all, their nature seems pretty much the same ; being equally fierce, subtle, cruel, and cowardly. The panther, including the leopard and the jaguar, or American panther, as they are
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De Sève del.

Jr^o Lodge sculp.

The Syagush.

the largest, so also are they the most dangerous of this kind; for the whole race of cats are noxious in proportion to their power to do mischief. They inhabit the most torrid latitudes of India, Africa, and America, and have never been able to multiply beyond the torrid zone. They are generally found in the thickest and the most entangled forests, and often near remote habitations, where they watch to surprize all kinds of domestic animals. They very seldom attack man, even though provoked by him; they seem rather desirous of finding safety by flight, or by climbing trees, at which they are very expert. In this manner also, they often pursue their prey; and, being expert at seizing it, as well above as below, they cause a vast destruction. Of all other animals, these are the most fullen, and, even to a proverb, untameable. They still preserve their fierce and treacherous spirit; and at those places where they are exposed to be seen among others, we often observe, that while their keeper is familiar with the lion or the bear, yet he is apprehensive of the large panther, and keeps it bound with the shortest chain.

As the ounce differs from these in figure and size, so also it seems to differ in disposition, being more mild, tractable, and tame.

These we frequently see as harmless and innocent as cats; and there is one at present in the Tower with which the keeper plays without the smallest apprehension. I own I was not a little uneasy, at first, for the man, when he put his hand through the bars, and called the animal by its name; but was a good deal surprized to see the creature, which one might suppose irritated by long confinement, come gently up to him, stroak his hand with its face, in the manner of a cat, and testify the utmost gentleness of disposition. The ounce, therefore, is remarkable for being easily tamed; and, in fact, it is employed all over the east for the purposes of hunting. Not, indeed, but that panthers themselves are sometimes used for this purpose, but they are never thoroughly subdued like the former, being usually brought to the field in a carriage, and kept chained and caged until they are shewn the gazelle, or the leveret, which is their prey. This they pursue rather by three or four great springs than by running. If they seize it by this sudden effort, it finds no mercy; but if it escapes from their first effort, they never attempt to pursue, and appear quite disappointed and confounded at their mischance. It sometimes happens that they are so much enraged at it, that they attack even their employer,

employer, and his only resource to avoid their fury is to throw them some small pieces of meat, which he has brought with him for that purpose.

The ounce, however, is not so dangerous; and is treated with more confidence and familiarity. It is usually brought to the field hoodwinked behind one of the horsemen. When the game appears, the ounce is instantly uncovered, and shewn where it lies; upon which the fierce creature darts like an arrow to the place, and seizes it at once, or, missing it, remains motionless in the place. It would be vain to attempt retrieving its disgrace by continuing the pursuit; for, although it bounds with greater agility than most other animals, yet it is slow and awkward in running, and has no means of finding the animal it pursues by the smell, as is common among those of the dog kind. From hence, therefore, it appears how much superior the European method of hunting is to that of the Asiatic; since whatever amusement this exercise affords must arise from the continuance of the chase, and from the fluctuation of doubt and expectation, which raise and depress the pursuers by turns. All this an Asiatic hunter is deprived of; and his greatest pleasure can scarcely be more than what among us is called coursing, in
which

which the dog pursues the animal, and keeps it constantly in view.

But it must not be supposed that it is from choice the Asiatics use this method of chase; for, no doubt, were dogs servicable among them as they are in Europe, they would be employed for the same purposes. But the fact is, that the extreme heat of the tropical climates produces such universal putrefaction, and sends up such various and powerful scents, that dogs are at first bewildered in the chase, and at last come to lose the delicacy of their scent entirely. They are, therefore, but little used in those warm countries; and what could they avail in places where almost every other animal of the forest is stronger and more rapacious? The lion, the tiger, the panther, and the ounce, are all natural enemies to the dog, and attack him wherever he appears with ungovernable fury. The breed, therefore, in those places, would quickly be destroyed; so that they are obliged to have recourse to those animals which are more fitted to serve them; and thus convert the ounce to those purposes for which dogs are employed in Europe.

The Catamountain, or Ocelot, is one of the fiercest and, for its size, one of the most destructive animals in the world. It is, as
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was before observed, a native of South-America, and by no means capable of the same education as the ounce, which it more approaches in size than in disposition. Two of these, from whom Mr. Buffon has taken his description, were brought over from Carthagenæ, and having been taken from the dam when very young, were afterwards suckled by a bitch. But, before they were three months old, they had strength and ingratitude sufficient to kill and devour their nurse. Their succeeding fierceness and malignity seemed to correspond with their first efforts; for no arts could tame or soften their natures; and while they continued in their cages, they still testified an unceasing disposition for slaughter. When their food was given them, the male always served himself before the female ventured to touch a bit; and it was not till he was satisfied that the other began. In their savage state, these animals are still more destructive; having great strength and agility, they very easily find and overtake their prey, which they pursue among the tops of the trees as well as on the ground; but what renders them still more mischievous is, their unceasing appetite rather for the blood than the flesh of their prey. They suck this with the greatest avidity, but frequently leave the carcase otherwise

otherwise untouched, in order to pursue other animals for the blood in like manner. They generally continue on the tops of trees, like our wild cats; where they make their nest, and often bring forth their young. When they spy any animal they can master, and there are but few in the forest but what are inferior, they dart down upon it with inevitable exactness.

The whole tribe of animals of the panther kind, with long tails, are chiefly inhabitants, as was said, of the torrid zone; but those of the short tailed kind, and particularly the lynx is principally found in the cold countries that are bordering on the pole. The lynx is chiefly to be met with in the north of Germany, Lithuania, Muscovy, Siberia, and North America. Those of the new continent, however, are rather smaller than in Europe, as is the case with almost all their quadrupedes; they are somewhat whiter also, but in other respects there is scarce any difference to be found among them *. This animal has been called by some *Lupus Cervarius*, or a creature compounded between a wolf and a stag; but for what reason is hard to guess; it no way resembles either in shape or in disposition. In its nature, it exactly resembles the cat, except that, being bigger and nearly two feet

* Buffon.

long, it is bolder and fiercer. Like the cat, it climbs trees, and seeks its prey by surprise; like the cat, it is delicate and cleanly, covering its urine with its paws; and resembles the wolf in nothing except its cry, which often deceives the hunters, and induces them to think they hear a wolf and not a lynx. This animal also, is rather more delicate than the cat; and, after having once feasted upon its prey, will never return to it again, but hunts the woods for another. From hence may have arisen the common report of the lynx having, of all other quadrupedes, the shortest memory. This, however, is not the only idle story that has been propagated of it: as of its seeing with such perspicuity as to perceive objects through walls and mountains; as of having its urine of such a quality, as to harden, and become a precious stone; with several others, propagated by ignorance or imposture.

The Siagush and the Serval are both so like all the rest of the cat kind in disposition, that it is but repeating the same account once more to give their distinct history. As the lynx is found only in cold countries, so the siagush is to be met with only in the warm tropical climates. It is used, in the same manner as the ounce, for hunting; but it seems to have a property which the other
has

has not; namely, that of being able to overtake its prey by pursuing it. Whether this is performed by having a finer scent than the former, or greater swiftneſs, we are not informed; being only told that when it overtakes either the gazelle or the antelope, it leaps upon their backs, and, getting forward to their ſhoulders, ſcratches their eyes out, by which means they become an eaſy prey to the hunters. Some have called this animal the lion's provider; and it is ſaid that when it calls him to purſue his prey, its voice very much reſembles that of one man calling another*. From hence we may conjecture that this animal purſues its prey in full cry, and that the lion only follows to partake or ſeize the ſpoil. The ſame account is given alſo of the jackal; and very probably it may be true, not only of theſe animals, but of ſome others, ſince it is natural enough to ſuppoſe that the lion will purſue whenever he is taught to diſcover his prey.

We had one of theſe animals a few years ago ſent over from the Eaſt-Indies, but it was not able to endure the change of climate, and it died in a very ſhort time after it was brought to the Tower. Whether conſumed by diſeaſe or not I cannot tell, but it ſeemed to

* Thevenot, vol. ii. p. 114.

me much slenderer than the cat or the lynx, and its ears were much longer; however, it is a very strong creature for its size; and has been known to kill a large dog in single combat*: nevertheless, it is like all of the cat kind except the lion, remarkable for its cowardice, and will never, except in cases of necessity, attack an animal that is its equal in strength or activity. For this reason, when brought into the field, and put upon a service of danger, it obstinately refuses, and is alert only in the pursuit of animals that are too feeble for resistance, or too timid to exert their strength.

From what has been said of this rapacious tribe, we perceive a similitude in the manners and dispositions of them all, from the lion to the cat. The similitude of their internal conformation, is still more exact; the shortness of their intestines, the number of their teeth, and the structure of their paws. The first of this class is the Lion, distinguishable from all the rest by his strength, his magnitude, and his mane. The second is the Tiger, rather longer than the lion, but not so tall, and known by the streaks and the vivid beauty of its robe; including also the American tiger or cougar; distinguishable by its size, next that of the tiger, its tawny

* Buffon.

colour, and its spots. The third is the Panther and the Leopard. The fourth is the Ounce, not so large as any of the former, spotted like them, but distinguishable by the cream coloured ground of its hair, and the great length of its tail, being above the length of its body. The fifth is the Cata-mountain or Tiger cat,, less than the ounce, but differing particularly in having a shorter tail, and being streaked down the back like a tiger. The sixth is the short tailed kind; namely, the Lynx, of the size of the former, but with a short tail, streaked, and the tips of its ears tufted with black. The seventh is the Siagush, differing from the lynx in not being mottled like it, in not being so large, and in having the ears longer, though tipped with black, as before. The eighth is the Serval, resembling the lynx in its form, and the shortness of its tail; streaked also like it, but not having the tips of its ears tufted. Lastly, the Cat, wild and tame, with all its varieties; all less than any of the former, but, like them, equally insidious, rapacious, and cruel.

This whole race may be considered as the most formidable enemy of mankind; there are others indeed stronger, but they are gentle, and never offer injury till injured: there
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are others more numerous, but they are more feeble, and rather look for safety by hiding from man, than opposing him. These are the only quadrupedes that make good their ground against him ; and which may be said to keep some kingdoms of the earth in their own possession. How many extensive countries are there in Africa, where the wild beasts are so numerous, that man is deterred from living amongst them ; reluctantly giving up to the lion and the leopard, extensive tracts, that seem formed only for his delight and convenience !

C H A P. VIII.

Animals of the Dog Kind.

THE second class of carnivorous quadrupeds may be denominated those of the dog kind. This class is neither so numerous nor so powerful as the former, and yet neither so treacherous, rapacious, or cowardly. This class may be principally distinguished by their claws, which have no sheath, like those of the cat kind, but still continue at the point of each toe, without a capability of being stretched forward, or drawn back. The nose also, as well as the jaw, of all the dog kind, is longer than in the cat; the body is in proportion, more strongly made, and covered with hair instead of fur. There are many internal distinctions also; as in the intestines, which are much longer in the dog kind, than in those of the cat; the eye is not formed for night vision; and the olfactory nerves are diffused, in the dog kinds, upon a very extensive membrane within the scull.

If we compare the natural habitudes of this class with the former, we shall find that the dog kinds are not so solitary as those of the cat, but love to hunt in company, and encourage each other with their mutual cries.

cries. In this manner the dog and the jackall pursue their prey; and the wolf and fox, which are of this kind, though more solitary and silent among us, yet, in countries where less persecuted, and where they can more fearless display their natural inclinations, they are found to keep together in packs, and pursue their game with alternate howlings.

Animals of the dog kind want some of the advantages of the cat kind, and yet are possessed of others in which the latter are deficient. Upon observing their claws, it will easily be perceived that they cannot, like cats, pursue their prey up the sides of a tree, and continue the chase among the branches; their unmanageable claws cannot stick in the bark, and thus support the body up along the trunk, as we see the cat very easily perform: whenever, therefore, their prey flies up the tree from them, they can only follow it with their eyes, or watch its motions till hunger again brings it to the ground. For this reason, the proper prey of the dog kind, are only those animals that, like themselves, are unfitted for climbing; the hare, the rabbit, the gazelle, or the roebuck.

As they are, in this respect, inferior to the cat, so they exceed it in the sense of smelling; by which alone they pursue their prey with certainty of success, wind it through
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all its mazes, and tire it down by perseverance. It often happens, however, in the savage state, that their prey is either too much diminished, or too wary to serve for a sufficient supply. In this case, when driven to an extremity, all the dog kinds can live for some time upon fruits and vegetables, which, if they do not please the appetite, at least serve to appease their hunger.

Of all this tribe, the Dog has every reason to claim the preference, being the most intelligent of all known quadrupedes, and the acknowledged friend of mankind. The dog*, independant of the beauty of his form, his vivacity, force and swiftness, is possessed of all those internal qualifications that can conciliate the affections of man, and make the tyrant a protector. A natural share of courage, an angry and ferocious disposition, renders the dog, in its savage state, a formidable enemy to all other animals: but these readily give way to very different qualities in the domestic dog, whose only ambition seems the desire to please; he is seen to come crouching along, to lay his force, his courage, and all his useful talents, at the feet of his master; he waits his orders, to which

* The rest of this description of the dog is taken from Mr. Buffon: what I have added, is marked as before.

he pays implicit obedience ; he consults his looks, and a single glance is sufficient to put him in motion ; he is more faithful even than the most boasted among men ; he is constant in his affections, friendly without interest, and grateful for the slightest favours ; much more mindful of benefits received, than injuries offered ; he is not driven off by unkindness ; he still continues humble, submissive, and imploring ; his only hope to be serviceable, his only terror to displease ; he licks the hand that has been just lifted to strike him, and at last disarms resentment, by submissive perseverance.

More docile than man, more obedient than any other animal, he is not only instructed in a short time, but he also conforms to the dispositions and the manners of those who command him. He takes his tone from the house he inhabits ; like the rest of the domestics, he is disdainful among the great, and churlish among clowns. Always assiduous in serving his master, and only a friend to his friends, he is indifferent to all the rest, and declares himself openly against such as seem to be dependant like himself. He knows a beggar by his cloaths, by his voice, or gestures, and forbids his approach. When at night the guard of the

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house is committed to his care, he seems proud of the charge; he continues a watchful centinel, he goes his rounds, scents strangers at a distance, and gives them warning of his being upon duty. If they attempt to break in upon his territories, he becomes more fierce, flies at them, threatens, fights, and either conquers alone, or alarms those who have most interest in coming to his assistance; however, when he has conquered, he quietly reposes upon the spoil, and abstains from what he has deterred others from abusing; giving thus at once a lesson of courage, temperance, and fidelity.

From hence we see of what importance this animal is to us in a state of nature. Supposing, for a moment, that the species had not existed, how could man, without the assistance of the dog, have been able to conquer, tame, and reduce to servitude, every other animal? How could he discover, chase and destroy, those that were noxious to him? In order to be secure, and to become master of all animated nature, it was necessary for him to begin by making a friend of a part of them; to attach such of them to himself, by kindness and caresses, as seemed fittest for obedience and active in pursuit. Thus the first art employed by man, was in conciliating the favour of the dog; and the

the fruits of this art were, the conquest and peaceable possession of the earth.

The generality of animals have greater agility, greater swiftness, and more formidable arms, from nature, than man; their senses, and particularly that of smelling, are far more perfect: the having gained, therefore, a new assistant, particularly, one whose scent is so exquisite as that of the dog, was the gaining a new sense, a new faculty, which before was wanting. The machines and instruments which we have imagined for perfecting the rest of the senses, do not approach to that already prepared by nature, by which we are enabled to find out every animal, though unseen, and thus destroy the noxious, and use the serviceable.

The dog, thus useful in himself, taken into a participation of empire, exerts a degree of superiority over all animals that require human protection. The flock and the herd obey his voice more readily even than that of the shepherd or the herdsman; he conducts them, guards them, keeps them from capriciously seeking danger, and their enemies he considers as his own. Nor is he less useful in the pursuit; when the sound of the horn, or the voice of the huntsman calls him to the field, he testifies his pleasure by every little art, and pursues with

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perseverance,

perseverance, those animals, which, when taken, he must not expect to divide. The desire of hunting is indeed natural to him as well as to his master, since war and the chase are the only employment of savages. All animals that live upon flesh hunt by nature; the lion and the tiger, whose force is so great that they are sure to conquer, hunt alone and without art; the wolf, the fox, and the tiger dog, hunt in packs, assist each other, and partake the spoil. But when education has perfected this talent in the domestic dog, when he has been taught by man to repress his ardour, to measure his motions, and not to exhaust his force by too sudden an exertion of it, he then hunts with method, and always with success.

“ Although the wild dog, such as he was before he came under the protection of mankind, is at present utterly unknown, no such animal being now to be found in any part of the world, yet there are many that, from a domestic state, have turned savage, and entirely pursue the dictates of nature.” In those deserted and uncultivated countries where the dog is found wild, they seem entirely to partake of the disposition of the wolf; they unite in large bodies, and attack the most formidable animals of the forest, the cougar, the panther, and the bison.

In

In America, where they were originally brought by Europeans, and abandoned by their masters, they have multiplied to such a degree, that they spread in packs over the whole country, attack all other animals, and even man himself does not pass without insult. They are there treated in the same manner as all other carnivorous animals, and killed wherever they happen to come: however, they are easily tamed: when taken home, and treated with kindness and lenity, they quickly become submissive and familiar, and continue faithfully attached to their masters. Different in this from the wolf or the fox, who though taken ever so young, are gentle only while cubs, and, as they grow older, give themselves up to their natural appetites of rapine and cruelty. In short, it may be asserted, that the dog is the only animal whose fidelity is unshaken; the only one who knows his master, and the friends of the family; the only one who instantly distinguishes a stranger; the only one who knows his name, and answers to the domestic call; the only one who seems to understand the nature of subordination, and seeks assistance; the only one who, when he misses his master, testifies his loss by his complaints; the only one who, carried to a distant place, can find the way home;

home; the only one whose natural talents are evident, and whose education is always successful.

In the same manner, as the dog is of the most complying disposition, so also is it the most susceptible of change in its form; the varieties of this animal being too many for even the most careful describer to mention. The climate, the food, and the education, all make strong impressions upon the animal, and produce alterations in its shape, its colour, its hair, its size, and in every thing but its nature. The same dog, taken from one climate, and brought to another, seems to become another animal; but different breeds are as much separated, to all appearance, as any two animals the most distinct in nature. Nothing appears to continue constant with them, but their internal conformation; different in the figure of the body, in the length of the nose, in the shape of the head, in the length and the direction of ears and tail, in the colour, the quality, and the quantity of the hair; in short, different in every thing but that make of the parts which serve to continue the species, and keep the animal distinct from all others. It is this peculiar conformation, this power of producing an animal that can reproduce,
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that marks the kind, and approximates forms that at first sight seem never made for conjunction.

From this single consideration, therefore, we may at once pronounce all dogs to be of one kind; but which of them is the original of all the rest, which of them is the savage dog from whence such a variety of descendants have come down, is no easy matter to determine. We may easily indeed, observe that all those animals which are under the influence of man, are subject to great variations. Such as have been sufficiently independent, so as to chuse their own climate, their own nourishment, and to pursue their own habits, preserve the original marks of nature, without much deviation; and it is probable, that the first of these is even at this day very well represented in their descendants. But such as man has subdued, transported from one climate to another, controlled in their manner of living, and their food, have most probably been changed also in their forms: particularly the dog has felt these alterations more strongly than any other of the domestic kinds; for living more like man, he may be thus said to live more irregularly also, and, consequently, must have felt also those changes that such variety would naturally produce. Some other causes also may be assigned

assigned for this variety in the species of the dog: as he is perpetually under the eye of his master, when accident has produced any singularity in its productions, man uses all his art to continue this peculiarity unchanged; either by breeding from such as had those singularities, or by destroying such as happened to want them; besides, as the dog produces much more frequently than some other animals, and lives a shorter time, so the chance for its varieties will be offered in greater proportion.

But which is the original animal, and which the artificial or accidental variety, is a question which, as was said, is not easily resolved. If the internal structure of dogs of different sorts be compared with each other, it will be found, except in the point of size, that in this respect they are exactly the same. This, therefore, affords no criterion. If other animals be compared with the dog internally, the wolf and the fox will be found to have the most perfect resemblance; it is probable, therefore, that the dog which most nearly resembles the wolf or the fox externally, is the original animal of its kind: for it is natural to suppose, that as the dog most nearly resembles them internally, so he may be near them in external resemblance also, except where art or accident has altered

tered his form. This being supposed, if we look among the number of varieties to be found in the dog, we shall not find one so like the wolf or the fox, as that which is called the shepherd's dog. This is that dog with long coarse hair on all parts except the nose, pricked ears, and a long nose, which is common enough among us, and receives his name from being principally used in guarding and attending on sheep. This seems to be the primitive animal of his kind; and we shall be the more confirmed in this opinion, if we attend to the different characters which climate produces in this animal, and the different races of dogs which are propagated in every country: and, in the first place, if we examine those countries which are still savage, or but half civilized, where it is most probable the dog, like his master, has received but few impressions from art, we shall find the shepherd's dog, or one very like him, still prevailing amongst them. The dogs that have run wild in America, and in Congo, approach this form. The dog of Siberia, Lapland, and Iceland, of the cape of Good Hope, of Madagascar, Madura, Calicut, and Malabar, have all a long nose, pricked ears, and resemble the shepherd's dog very nearly. In Guinea, the dog very speedily takes this form;

form; for, at the second or third generation, the animal forgets to bark, his ears and his tail become pointed, and his hair drops off, while a coarser, thinner kind comes in the place. This sort of the dog is also to be found in the temperate climates in great abundance, particularly among those who, preferring usefulness to beauty, employ an animal that requires very little instruction to be serviceable. Notwithstanding this creature's deformity, his melancholy and savage air, he is superior to all the rest of his kind in instinct; and, without any teaching, naturally takes to tending flocks, with an assiduity and vigilance that at once astonishes, and yet relieves his master.

In more polished and civilized places, the dog seems to partake of the universal refinement; and, like the men, becomes more beautiful, more majestic, and more capable of assuming an education foreign to his nature. The dogs of Albany, of Greece, of Denmark, and of Ireland, are larger and stronger than those of any other kind. In France, Germany, Spain, and Italy, the dogs are of various kinds, like the men; and this variety seems formed by crossing the breed of such as are imported from various climates.

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The shepherd's dog may, therefore, be considered as the primitive stock from whence these varieties are all derived. He makes the stem of that genealogical tree which has been branched out into every part of the world. This animal still continues pretty nearly in its original state among the poor in temperate climates; being transported into the colder regions, he grows less and more ugly among the Laplanders; but becomes more perfect in Iceland, Russia and Siberia, where the climate is less rigorous, and the people more civilized. Whatever differences there may be among the dogs of these countries, they are not very considerable, as they all have strait ears, long and thick hair, a savage aspect, and do not bark either so often or so loud as dogs of the more cultivated kind.

The shepherd's dog, transported into the temperate climates, and among people entirely civilized, such as England, France, and Germany, will be divested of his savage air, his pricked ears, his rough, long, and thick hair, and, from the single influence of climate and food alone, will become either a *Matin*, a *Mastiff*, or an *Hound*. These three seem the immediate descendants of the former; and from them the other varieties are produced.

The Hound, the Harrier, and the Beagle, seem all of the same kind; for although the bitch is covered but by one of them, yet in her litters are found puppies resembling all the three. This animal, transported into Spain or Barbary, where the hair of all quadrupeds becomes soft and long, will be there converted into the land-spaniel, and the water-spaniel, and these of different sizes.

The Grey Matin Hound, which is the second branch, transported to the north, becomes the great Danish dog; and this, sent into the south, becomes the grey-hound, of different sizes. The same, transported into Ireland, the Ukraine, Tartary, Epirus, and Albania, becomes the great wolf dog, known by the name of the Irish wolf dog.

The Mastiff, which is the third branch, and chiefly a native of England, when transported into Denmark, becomes the little Danish dog; and this little Danish dog, sent into the tropical and warm climates, becomes the animal called the Turkish dog, without hair. All these races, with their varieties, are produced by the influence of climate, joined to the different food, education, and shelter, which they have received among mankind. All other kinds may be considered as mongrel races, produced by the concurrence of these, and found rather by crossing

crossing the breed than by attending to the individual. “ As these are extremely numerous, and very different in different countries, it would be almost endless to mention the whole ; besides, nothing but experience can ascertain the reality of these conjectures already made, although they have so much the appearance of probability ; and until that gives more certain information, we must be excused from entering more minutely into the subject.

“ With regard to the dogs of our country in particular, the varieties are very great, and the number every day encreasing. And this must happen in a country so open by commerce to all others, and where wealth is apt to produce capricious predilection. Here the ugliest and most useless of their kinds will be entertained merely for their singularity ; and, being imported only to be looked at, they will lose even that small degree of sagacity which they possessed in their natural climates. From this importation of foreign useless dogs, our own native breed is, I am informed, greatly degenerated, and the varieties now to be found in England much more numerous than they were in the times of Queen Elizabeth, when Doctor Caius attempted their natural history. Some of those he mentions are no longer to be found
among

among us, although many have since been introduced, by no means so serviceable as those which have been suffered to decay.

“ He divides the whole race into three kinds. The first is, the generous kind, which consists of the tarrier, the harrier, and the blood-hound; the gaze-hound, the grey-hound, the leymmer, and the tumbler; all these are used for hunting. Then the spaniel, gentle, or lap-dog, for amusement. The second is the farm kind; consisting of the shepherd's dog and the mastiff. And the third is the mongrel kind; consisting of the wappe, the turn-spit, and the dancer. To these varieties we may add at present, the bull-dog, the Dutch mastiff, the harlequin, the pointer, and the Dane, with a variety of lap-dogs, which, as they are perfectly useless, may be considered as unworthy of a name.

“ The Tarrier is a small kind of hound *, with rough hair, made use of to force the fox or the badger out of their holes; or rather to give notice, by their barking, in what part of the kennel the fox or badger resides, when the sportsmen intend to dig them out.

“ The Harrier, as well as the beagle and the fox-hound are used for hunting; of all

* British Zoology.

other animals, they have the quickest and most distinguishing sense of smelling. The properly breeding, matching, and training these, make up the business of many men's lives.

“ The Blood-hound was a dog of great use, and in high esteem among our ancestors. Its employment was to recover any game that had escaped wounded from the hunter, or had been killed, and stolen out of the forest. But it was still more employed in hunting thieves and robbers by their footsteps. At that time, when the country was less peopled than at present, and when, consequently, the footsteps of one man were less crossed and obliterated by those of others, this animal was very serviceable in such pursuits ; but at present, when the country is every where peopled, this variety is quite worn out ; probably because it was found of less service than formerly.

“ The Gaze-hound hunted, like our grey-hounds, by the eye and not by the scent. It chased indifferently the fox, hare, or buck. It would select from the herd the fattest and fairest deer, pursue it by the eye, and if lost recover it again with amazing sagacity. This species is now lost or unknown among us.

“ The

“ The Grey-hound is very well known at present, and was formerly held in such estimation, that it was the peculiar companion of a gentleman ; who, in the times of semi-barbarism, was known by his horse, his hawk, and his grey-hound. Persons under a certain rank of life are forbidden, by some late game-laws, from keeping this animal ; wherefore, to disguise it the better, they cut off its tail.

“ The Leymmer is a species now unknown to us. It hunted both by scent and sight, and was led in a leyme or thong, from whence it received its name.

“ The Tumbler was less than the hound, more scraggy, and had pricked ears ; so that by the description it seems to answer to the modern lurcher. This took its prey by mere cunning, depending neither on the goodness of its nose nor its swiftness. If it came into a warren, it neither barked nor ran on the rabbits ; but, seemingly inattentive, approached sufficiently near till it came within reach, and then seized them by a sudden spring.

“ The Land Spaniel, which probably had its name from Spain, where it might have acquired the softness of its hair, is well known at present. There are two varieties of this kind ; namely, the Slater, used in hawking to spring the game ; and the Setter,
that

that crouches down when it scents the birds, till the net be drawn over them. I have read somewhere that the famous poet, Lord Surry, was the first who taught dogs to set; it being an amusement to this day only known in England.

“ The Water Spaniel is another species used in fowling. This seems to be the most docile of all the dog kind; and this docility is particularly owing to his natural attachment to man. Many other kinds will not bear correction; but this patient creature, though very fierce to strangers, seems unalterable in his affections; and blows and ill usage seem only to encrease his regard.

“ The Lap-dog, at the time of Doctor Caius, was of Maltese breed; at present it comes from different countries; in general, the more aukward or extraordinary these are, the more they are prized.

“ The Shepherd's dog has been already mentioned, and as for the mastiff he is too common to require a description. Doctor Caius tells us, that three of these were reckoned a match for a bear, and four for a lion. However, we are told that three of them overcame a lion in the time of King James the First; two of them being disabled in the combat, the third obliged the lion to seek for safety by flight.

“As to the last division, namely, of the Wappe, the Turn-spit, and the Dancer, these were mongrels, of no certain shape, and made use of only to alarm the family, or, being taught a variety of tricks, were carried about as a show.

“With regard to those of later importation, the Bull-dog, as Mr. Buffon supposes, is a breed between the small Dane and the English mastiff. The large Dane is the tallest dog that is generally bred in England. It is somewhat between a mastiff and a greyhound in shape, being more slender than the other. They are chiefly used rather for shew than service, being neither good in the yard nor the field. The highest are most esteemed; and they generally cut off their ears to improve their figure, as some absurdly suppose. The harlequin is not much unlike the small Dane, being an useless animal, somewhat between an Italian greyhound and a Dutch mastiff. To these several others might be added, such as the pug-dog, the black breed, and the pointer; but, in fact, the varieties are so numerous as to fatigue even the most ardent curiosity.”

Of those of the foreign kinds, I shall mention only three, which are more remarkable than any of the rest. The Lion Dog
greatly

greatly resembles that animal, in miniature, from whence it takes the name. The hair of the fore part of its body is extremely long, while that of the hinder part is as short. The nose is short, the tail long, and tufted at the point, so that in all these particulars it is entirely like the lion. However, it differs very much from that fierce animal in nature and disposition, being one of the smallest animals of its kind, extremely feeble, timid, and inactive. It comes originally from Malta, where it is found so small that women carry it about in their sleeves.

That animal falsely called the Turkish Dog, differs greatly from all the rest of the kind, in being entirely without hair. The skin, which is perfectly bare, is of a flesh colour, with brown spots; and their figure at first view is rather disgusting. These seem to be of the small Danish breed, brought into a warm climate, and there, by a succession of generations, divested of their hair. For this reason, they are extremely chilly, and unable to endure the cold of our climate; and even in the midst of summer they continue to shiver as we see men in a frosty day. Their spots are brown, as was said, well marked, and easily distinguishable in summer, but in the cold of winter they entirely disappear. They are called the Turkish breed,

although brought from a much warmer climate; for some of them have been known to come from the warmest parts of Africa and the East-Indies.

“ The last variety, and the most wonderful of all that I shall mention, is the Great Irish Wolf Dog; that may be considered as the first of the canine species. This animal, which is very rare even in the only country in the world where it is to be found, is rather kept for shew than use, there being neither wolves nor any other formidable beasts of prey in Ireland, that seem to require so powerful an antagonist. The wolf dog is therefore bred up in the houses of the great, or such gentlemen as chuse to keep him as a curiosity, being neither good for hunting the hare, the fox, or the stag, and equally unserviceable as an house dog. Nevertheless, he is extremely beautiful and majestic to appearance, being the greatest of the dog kind to be seen in the world. The largest of those I have seen, and I have seen above a dozen, was about four feet high, or as tall as a calf of a year old. He was made extremely like a grey-hound, but rather more robust, and inclining to the figure of the French *matin*, or the great Dane. His eye was mild, his colour white, and his nature seemed heavy and phlegmatic. This I ascribed to his hav-

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ing been bred up to a size beyond his nature ; for we see in man, and all other animals that such as are overgrown are neither so vigorous nor alert as those of more moderate stature. The greatest pains had been taken with these to enlarge the breed, both by food and matching. This end was effectually obtained, indeed ; for the size was enormous ; but, as it seemed to me, at the expence of the animal's fierceness, vigilance, and sagacity. However, I was informed otherwise ; the gentleman who bred them assuring me that a mastiff would be nothing when opposed to one of them, who generally seized their antagonist by the back : he added, that they would worry the strongest bull dogs, in a few minutes, to death. But this strength did not appear either in their figure or their inclinations ; they seemed rather more timid than the ordinary race of dogs ; and their skin was much thinner, and consequently less fitted for combat. Whether with these disadvantages they were capable, as I was told, of singly coping with bears, others may determine ; however, they have but few opportunities, in their own country, of exerting their strength, as all wild carnivorous animals there are only of the vermin kind. Mr. Buffon seems to be of opinion that these are the true Molossian dogs of the ancients ; he
gives

gives no reason for this opinion ; and I am apt to think it ill grounded. Not to trouble the reader with a tedious critical disquisition, which I have all along avoided, it will be sufficient to observe, that Nemesianus, in giving directions for the choice of a bitch, advises to have one of Spartan or Molossian breed ; and among several other perfections, he says that the ears should be dependent, and fluctuate as she runs *. This, however, is by no means the case with the Irish wolf-dog, whose ears resemble those of the greyhound, and are far from fluctuating with the animal's motions. But of whatever kinds these dogs may be, whether known among the ancients, or whether produced by a later mixture, they are now almost quite worn away, and are very rarely to be met with even in Ireland. If carried to other countries, they soon degenerate ; and even at home, unless great care be taken, they quickly alter. They were once employed in clearing the island of wolves, which infested it in great plenty ; but these being destroyed, the dogs also are wearing away, as if Nature

* *Elige tunc cursu facilem, facilemque recursu,
In Lacedæmonio natam seu rure Molosso.—
Renibus ampla fatis validis, diductaque coxas
Cuique nimis molles fluitent in cursibus aures.*

NEMESIAN.

meant

meant to annihilate the species when they had no longer any services to perform.

“ In this manner several kinds of animals fade from the face of nature that were once well known, but are now seen no longer. The enormous elk of the same kingdom, that, by its horns, could not have been less than eleven feet high, the wolf, and even the wolf-dog, are extinct, or only continued in such a manner as to prove their former plenty and existence. From hence it is probable that many of the nobler kinds of dogs, of which the ancients have given us such beautiful descriptions, are now utterly unknown; since among the whole breed we have not one that will venture to engage the lion or the tiger in single combat. The English bull-dog is perhaps the bravest of the kind; but what are his most boasted exploits to those mentioned of the Epirotic dogs by Pliny, or the Indian dogs by Ælian? The latter gives us a description of a combat between a dog and a lion, which I will take leave to translate.

“ When Alexander was pursuing his conquests in India, one of the principal men of that country was desirous of shewing him the value of the dogs which his country produced. Bringing his dog into the king's presence,

presence, he ordered a stag to be let loose before him, which the dog, despising as an unworthy enemy, remained quite regardless of the animal, and never once stirred from his place. His master then ordered a wild boar to be set out; but the dog thought even this a despicable foe, and remained calm and regardless as before. He was next tried with a bear; but still despising his enemy, he only waited for an object more worthy of his courage and his force. At last, they brought forth a tremendous lion, and then the dog acknowledged his antagonist, and prepared for combat. He instantly discovered a degree of ungovernable ardour; and, flying at the lion with fury, seized him by the throat, and totally disabled him from resistance. Upon this, the Indian, who was desirous of surprizing the king, and knowing the constancy and bravery of his dog, ordered his tail to be cut off; which was easily performed as the bold animal was employed in holding the lion. He next ordered one of his legs to be broken; which, however, did not in the least abate the dog's ardour, but he still kept his hold as before. Another leg was then broken; but the dog, as if he had suffered no pain, only pressed the lion still the more. In this cruel manner, all his
legs

legs were cut off, without abating his courage; and at last, when his head was separated from his body, the jaws seemed to keep their former hold. A sight so cruel did not fail to affect the king with very strong emotions, at once pitying the dog's fate and admiring his fortitude. Upon which the Indian, seeing him thus moved, presented him with four dogs of the same kind, which in some measure alleviated his uneasiness for the loss of the former.

“The breed of dogs, however, in that country, is at present very much inferior to what this story seems to imply; since, in many places, instead of dogs, they have animals of the cat kind for hunting. In other places also, this admirable and faithful animal, instead of being applied to his natural uses, is only kept to be eaten. All over China there are dog-butchers, and shambles appointed for selling their flesh. In Canton, particularly, there is a street appointed for that purpose; and what is very extraordinary, wherever a dog-butcher appears all the dogs of the place are sure to be in full cry after him; they know their enemy, and persecute him as far as they are able.” Along the coasts of Guinea, their flesh is esteemed a delicacy by the Negroes; and they will give one of their cows for a dog.

dog. But, among this barbarous and brutal people, scarce any thing that has life comes amifs; and they may well take up with a dog, fince they confider toads, lizards, and even the flefh of the tiger itfelf, as a dainty. It may perhaps happen that the flefh of this animal, which is fo indifferent in the temperate climates, may affume a better quality in thofe which are more warm; but it is more than probable that the diverfity is rather in man than in the flefh of the dog; fince in the cold countries the flefh is eaten with equal appetite by the favages; and they have their dog-feafts in the fame manner as we have ours for venifon.

In our climate, the wild animals that moft approach the dog are the wolf and the fox; thefe in their internal conformation greatly refemble each other, and yet in their natures are very diftinct. The ancients afferted that they bred together; and I am affured by credible perfons that there are many animals in this country bred between a dog and a fox. However, all the endeavours of Mr. Buffon to make them engender, as he affures us, were ineffectual. For this purpofe, he bred up a young wolf, taken in the woods, at two months old, with a matin dog of the fame age. They were fhut up together, without any other, in a large yard, where they had
a fhelter

a shelter for retiring. They neither of them knew any other individual of their kind, nor even any other man but he who had the charge of feeding them. In this manner they were kept for three years; still with the same attention, and without constraining or tying them up. During the first year the young animals played with each other continually, and seemed to love each other very much. In the second year they began to dispute about their victuals, although they were given more than they could use. The quarrel always began on the wolf's side. They were brought their food, which consisted of flesh and bones, upon a large wooden platter, which was laid on the ground. Just as it was put down, the wolf, instead of falling to the meat, began by driving off the dog; and took the platter in his teeth so expertly, that he let nothing of what it contained fall upon the ground; and in this manner carried it off; but as he could not entirely escape, he was frequently seen to run with it round the yard five or six times, still carrying it in a position that none of its contents could fall. In this manner it would continue running, only now and then stopping to take breath, until the dog coming up, the wolf would leave the victuals to attack him. The dog, however, was the stronger

stronger of the two; but as it was more gentle, in order to secure him from the wolf's attack, he had a collar put round his neck. In the third year, the quarrels of these ill paired associates were more vehement, and their combats more frequent; the wolf, therefore, had a collar put about its neck, as well as the dog, who began to be more fierce and unmerciful. During the two first years, neither seemed to testify the least tendency towards engendering; and it was not till the end of the third, that the wolf, which was the female, shewed the natural desire, but without abating either in its fierceness or obstinacy. This appetite rather encreased than repressed their mutual animosity; they became every day more intractable and ferocious, and nothing was heard between them but the sounds of rage and resentment. They both, in less than three weeks, became remarkably lean, without ever approaching each other, but to combat. At length, their quarrels became so desperate, that the dog killed the wolf, who was become more weak and feeble; and he was soon after himself obliged to be killed, for, upon being set at liberty, he instantly flew upon every animal he met, fowls, dogs, and even men themselves not escaping his savage fury.

The same experiment was tried upon foxes, taken young, but with no better success, they were never found to engender with dogs; and our learned naturalist seems to be of opinion that their natures are too opposite ever to provoke mutual desire. One thing, however, must be remarked, that the animals on which he tried his experiments, were rather too old when taken, and had partly acquired their natural savage appetites, before they came into his possession. The wolf, as he acknowledges, was two or three months old before it was caught, and the foxes were taken in traps. It may, therefore, be easily supposed, that nothing could ever after thoroughly tame those creatures, that had been suckled in the wild state, and had caught all the habitudes of the dam. I have seen these animals, when taken earlier in the woods, become very tame; and, indeed, they rather were displeasing by being too familiar than too shy. It were to be wished that the experiment were tried upon such as these; and it is more than probable that it would produce the desired success. Nevertheless, these experiments are sufficient to prove that neither the wolf nor the fox are of the same nature with the dog, but each of a species perfectly distinct,

distinct, and their joint produce most probably unfruitful.

The dog, when first whelped, is not a completely finished animal. In this kind, as in all the rest which bring forth many at a time, the young are not so perfect as in those which bring forth but one or two. They are always produced with the eyes closed, the lids being held together, not by sticking, but by a kind of thin membrane, which is torn as soon as the upper eye-lid becomes strong enough to raise it from the under. In general, their eyes are not opened till ten or twelve days old. During that time, the bones of the scull are not completed, the body is puffed up, the nose is short, and the whole form but ill sketched out. In less than a month the puppy begins to use all its senses; and, from thence, makes hasty advances to its perfection. At the fourth month the dog loses some of his teeth, as in other animals, and these are renewed by such as never fall. The number of these amount to forty-two, which is twelve more than is found in any of the cat kind, which are known never to have above thirty. The teeth of the dog being his great and only weapon, are formed in a manner much more serviceable than those of the former; and there is scarce any quadru-
pede

pede that has a greater facility in rending, cutting, or chewing its food. He cuts with his incisors, or fore-teeth, he holds with his four great canine teeth, and he chews his meat with his grinders; these are fourteen in number, and so placed that, when the jaws are shut, there remains a distance between them, so that the dog, by opening his mouth ever so wide does not lose the power of his jaws. But it is otherwise in the cat kind, whose incisors or cutting teeth are very small, and whose grinding teeth, when brought together, touch more closely than those of the dog, and, consequently, have less power. Thus, for instance, I can squeeze any thing more forcibly between my thumb and fore finger, where the distance is greater, than between any other two fingers, whose distance from each other is less.

This animal is capable of reproducing at the age of twelve months*, goes nine weeks with young, and lives to about the age of

* To this description I will beg leave to add a few particulars from Linnæus, as I find them in the original. Vomitua gramina purgatur: cacat supra lapidem. Album græcum anti septicum summum. Mingit ad latus (this, however, not till the animal is nine months old) cum hospite sæpe centies. Odorat anum alterius. Prociis rixantibus crudelis. Menstruans cutulit cum variis. Mordet illa illos. Cohæret copula junctus.

twelve. Few quadrupedes are less delicate in their food; and yet there are many kinds of birds which the dog will not venture to touch. He is even known, although in a savage to state, abstain from injuring some which one might suppose he had every reason to oppose. The dogs and the vultures which live wild about Grand Cairo in Egypt, (for the Mahometan law has expelled this useful animal from human society) continue together in a very sociable and friendly manner*. As they are both useful in devouring such carcases as might otherwise putrefy, and thus infect the air, the inhabitants supply them with provisions every day, in order to keep them near the city. Upon these occasions, the quadrupedes and birds are often seen together tearing the same piece of flesh, without the least enmity; on the contrary, they are known to live together with a kind of affection, and bring up their young in the same nest.

Although the dog is a voracious animal, yet he can bear hunger for a very long time. We have an instance, in the Memoirs of the Academy of Sciences, of this kind, in which a bitch that had been forgotten in a country-house, lived forty days, without any other nourishment than the

* Hasselquist Her. Palæstin, p. 232.

wool of a quilt which she had torn in pieces. It should seem that water is more necessary to the dog than food; he drinks often, though not abundantly: and it is commonly believed, that when abridged in water, he runs mad. This dreadful malady, the consequences of which are so well known, is the greatest inconvenience that results from the keeping this faithful domestic. But it is a disorder by no means so frequent as the terrors of the timorous would suppose; the dog has been often accused of madness, without a fair trial; and some persons have been supposed to receive their deaths from his bite, when either their own ill-grounded fears, or their natural disorders were the true cause.

T H E W O L F.

THE dog and the wolf are so very much alike internally, that the most expert anatomists can scarce perceive the difference; and it may be asserted also, that, externally, some dogs more nearly resemble the wolf than they do each other. It was this strong similitude that first led some naturalists to consider them as the same animal, and to look upon the wolf as the dog in its state of savage freedom: however,

this opinion is entertained no longer; the natural antipathy those two animals bear to each other; the longer time which the wolf goes with young than the dog, the one going over an hundred days, and the other not quite fixty; the longer period of life in the former than the latter, the wolf living twenty years, the dog not fifteen; all sufficiently point out a distinction, and draw a line that must for ever keep them asunder.

The wolf, from the tip of the nose, to the insertion of the tail, is about three feet seven inches long, and about two feet five inches high; which shews him to be larger than our great breed of mastiffs, which are seldom found to be above three feet by two. His colour is a mixture of black, brown, and grey, extremely rough and hard, but mixed towards the roots with a kind of ash coloured fur. In comparing him to any of our well known breed of dogs, the great Dane, or mongrel greyhound, for instance, he will appear to have the legs shorter, the head larger, the muzzle thicker, the eyes smaller and more separated from each other, and the ears shorter and straiter. He appears, in every respect, stronger than the dog; and the length of his hair contributes still more to his robust appearance. The feature which principally

ly distinguishes the visage of the wolf from that of the dog, is the eye, which opens slantingly upwards, in the same direction with the nose; whereas, in the dog, it opens more at right angles with the nose, as in man. The tail also, in this animal, is long and bushy; and he carries it rather more between his hind legs than the dog is seen to do. The colour of the eye-balls in the wolf are of a fiery green, and give his visage a fierce and formidable air, which his natural disposition does by no means contradict*.

The wolf is one of those animals whose appetite for animal food is the most vehement; and whose means of satisfying this appetite are the most various. Nature has furnished him with strength, cunning, agility, and all those requisites which fit an animal for pursuing, overtaking, and conquering its prey; and yet, with all these, the wolf most frequently dies of hunger, for he is the declared enemy of man. Being long proscribed, and a reward offered for his head, he is obliged to fly from human habitations, and to live in the forest, where the few wild animals to be found there, escape

* The rest of this history of the wolf is taken from Mr. Buffon, and I look upon it as a complete model for natural history. If I add or differ, I mark it as usual.

him either by their swiftness or their art; or are supplied in too small a proportion to satisfy his rapacity. He is naturally dull and cowardly; but frequently disappointed, and as often reduced to the verge of famine, he becomes ingenious from want, and courageous from necessity. When pressed with hunger, he braves danger, and comes to attack those animals which are under the protection of man, particularly such as he can readily carry away, lambs, sheep, or even dogs themselves, for all animal food comes then equally agreeable. When this excursion has succeeded, he often returns to the charge, until having been wounded or hard pressed by the dogs, or the shepherds, he hides himself by day in the thickest coverts, and only ventures out at night; he then sallies forth over the country, keeps peering round the villages, carries off such animals as are not under protection, attacks the sheep-folds, scratches up and undermines the thresholds of doors where they are housed, enters furious, and destroys all before he begins to fix upon and carry off his prey. When these sallies do not succeed, he then returns to the thickest part of the forest, content to pursue those smaller animals, which, even when taken, afford him but a scanty supply. He there goes
regularly

regularly to work, follows by the scent, opens to the view, still keeps following, hopeless himself of overtaking the prey, but expecting that some other wolf will come in to his assistance, and then content to share the spoil. At last, when his necessities are very urgent, he boldly faces certain destruction; he attacks women and children, and sometimes ventures even to fall upon men, becomes furious by his continual agitations, and ends his life in madness.

The wolf as well externally as internally, so nearly resembles the dog, that he seems modelled upon the same plan; and yet he only offers the reverse of the medal. If his form be like, his nature is so different, that he only preserves the ill qualities of the dog, without any of his good ones. Indeed, they are so different in their dispositions, that no two animals can have a more perfect antipathy to each other. A young dog shudders at the sight of a wolf; he even shuns his scent, which, though unknown, is so repugnant to his nature, that he comes trembling to take protection near his master. A dog who is stronger, and who knows his strength, bristles up at the sight, testifies his animosity, attacks him with courage, endeavours to put him to flight, and does all in
his

his power to rid himself of a presence that is hateful to him. They never meet without either flying or fighting; fighting for life and death, and without mercy on either side. If the wolf is the stronger, he tears and devours his prey: the dog, on the contrary, is more generous, and contents himself with his victory; he does not seem to think that *the body of a dead enemy smells well*; he leaves him where he falls, to serve as food for birds of prey, or for other wolves, since they devour each other; and when one wolf happens to be desperately wounded, the rest track him by his blood, and are sure to shew him no mercy.

The dog, even in his savage state, is not cruel; he is easily tamed, and continues attached to his master. The wolf when taken young, becomes tame, but never has an attachment; nature is stronger in him than education; he resumes, with age, his natural dispositions, and returns, as soon as he can, to the woods from whence he was taken. Dogs, even of the dullest kinds, seek the company of other animals; they are naturally disposed to follow and accompany other creatures beside themselves; and even by instinct, without any education, take to the care of flocks and herds. The wolf, on the contrary, is the enemy of all society;

society ; he does not even keep much company with those of his kind. When they are seen in packs together, it is not to be considered as a peaceful society, but a combination for war : they testify their hostile intentions by their loud howlings, and by their fierceness discover a project for attacking some great animal, such as a stag or a bull, or to destroy some more redoubtable watch-dog. The instant their military expedition is completed, their society is at an end ; they then part, and each returns in silence to his solitary retreat. There is not even any strong attachment between the male and female ; they seek each other only once a year, and remain but a few days together : they always couple in winter ; at which time several males are seen following one female, and this association is still more bloody than the former : they dispute most cruelly, growl, bark, fight, and tear each other ; and it sometimes happens that the majority kill the wolf which has been chiefly preferred by the female. It is usual for the she wolf to fly from them all with him she has chosen ; and watches this opportunity when the rest are asleep.

The season for coupling does not continue above twelve or fifteen days ; and usually commences among the oldest, those which
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are young being later in their desires. The males have no fixed time for engendering ; they pass from one female to the other, beginning at the end of December, and ending at the latter end of February. The time of pregnancy is about three months and an half ; and the young wolves are found from the latter end of April to the beginning of July. The long continuance of the wolf's pregnancy is sufficient to make a distinction between it and the dog ; did not also the fiery fierceness of the eyes, the howl instead of barking, and the greater duration of its life, leave no doubt of its being an animal of its own particular species. In other respects, however, they are entirely alike ; the wolf couples exactly like the dog, the parts are formed in the same manner, and their separation hindered by the same cause. When the she-wolves are near their time of bringing forth, they seek some very tufted spot, in the thickest part of the forest ; in the middle of this they make a small opening, cutting away the thorns and briars with their teeth, and afterwards carry thither a great quantity of moss, which they form into a bed for their young ones. They generally bring forth five or six, and sometimes even to nine at a litter. The cubs are brought forth, like those of the bitch, with the eyes closed ;

closed ; the dam suckles them for some weeks, and teaches them betimes to eat flesh, which she prepares for them, by chewing it first herself. Some time after she brings them stronger food, hares, partridges, and birds yet alive. The young wolves begin by playing with them, and end by killing them. The dam then strips them of their feathers, tears them in pieces, and gives to each of them a share. They do not leave the den where they have been littered, till they are six weeks, or two months old. They then follow the old one, who leads them to drink to the trunk of some old tree where the water has settled, or at some pool in the neighbourhood. If she apprehends any danger, she instantly conceals them in the first convenient place, or brings them back to their former retreat. In this manner they follow her for some months ; when they are attacked, she defends them with all her strength, and more than usual ferocity. Although, at other times, more timorous than the male, at that season she becomes bold and fearless ; willing perhaps to teach the young ones future courage by her own example. It is not till they are about ten or twelve months old, and until they have shed their first teeth, and completed the new, that she thinks them in a capacity to shift for them-

themselves. Then when they have acquired arms from nature, and have learned industry and courage from her example, she declines all future care of them, being again engaged in bringing up a new progeny.

The males and females are in a capacity to engender when two years old. It is probable that the females of this species, as well as of most others, are sooner completed than the males; but this is certain, that they never desire to copulate until their second winter; from whence we may suppose that they live fifteen or twenty years; for allowing three years for their complete growth, this multiplied by seven gives them a life of twenty-one; most animals, as has been observed, living about seven times the number of years which they take to come to perfection. Of this, however, there is as yet no certainty, no more than of what huntsmen assert, that in all the litters there are more males than females. From them also we learn that there are some of the males who attach themselves to the female, who accompany her during her gestation, until the time of bringing forth, when she hides the place of her retreat from the male, lest he should devour her cubs. But after this, when they are brought forth, that he then takes the same care of them as the female, carries them

them provisions, and, if the dam should happen to be killed, rears them up in her stead.

The wolf grows grey as he grows old, and his teeth wear, like those of most other animals, by using. He sleeps when his belly is full, or when he is fatigued, rather by day than night; and always, like the dog, is very easily waked. He drinks frequently; and in times of drought, when there is no water to be found in the trunks of old trees, or in the pools about the forest, he comes often, in the day, to the brooks, or the lakes in the plain. Although very voracious, he supports hunger for a long time, and often lives four or five days without food, provided he be supplied with water.

The wolf has great strength, particularly in his fore-parts, in the muscles of his neck and his jaws. He carries off a sheep in his mouth without letting it touch the ground, and runs with it much swifter than the shepherds who pursue him; so that nothing but the dogs can overtake, and oblige him to quit his prey. He bites cruelly, and always with greater vehemence in proportion as he is least resisted; for he uses precautions with such animals as attempt to stand upon the defensive. He is ever cowardly,
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and never fights but when under a necessity of satisfying hunger, or making good his retreat. When he is wounded by a bullet, he is heard to cry out ; and yet, when surrounded by the peasants, and attacked with clubs, he never howls as the dog under correction, but defends himself in silence, and dies as hard as he lived.

His nature is, in fact, more savage than that of the dog ; he has less sensibility and greater strength. He travels, runs, and keeps plundering for whole days and nights together. He is in a manner indefatigable ; and perhaps of all animals he is the most difficult to be hunted down. The dog is good natured and courageous ; the wolf, though savage, is ever fearful. If he happens to be caught in a pit-fall, he is for some time so frightened and astonished, that he may be killed without offering to resist, or taken alive without much danger. At that instant, one may clap a collar round his neck, muzzle him, and drag him along, without his ever giving the least signs of anger or resentment. At all other times he has his senses in great perfection ; his eye, his ear, and particularly his sense of smelling, which is even superior to the two former. He smells a carcase at more than a league's distance ; he also perceives living animals a
great

great way off, and follows them a long time upon the scent. Whenever he leaves the wood, he always takes care to go out against the wind. When just come to its extremity, he stops to examine, by his smell, on all sides, the emanations that may come either from his enemy or his prey, which he very nicely distinguishes. He prefers those animals which he kills himself to those he finds dead ; and yet he does not disdain these when no better is to be had. He is particularly fond of human flesh ; and perhaps, if he were sufficiently powerful, he would eat no other. Wolves have been seen following armies, and arriving in numbers upon the field of battle, where they devoured such dead bodies as were left upon the field, or but negligently interred. These, when once accustomed to human flesh, ever after seek particularly to attack mankind, and chuse to fall upon the shepherd rather than his flock. We have had a late instance of two or three of these keeping a whole province, for more than a month, in a continual alarm.

It sometimes happens that a whole country is called out to extirpate these most dangerous invaders. The hunting the wolf is a favourite diversion among the great of some countries ; and it must be confessed it seems to be the most useful of any. These animals
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are distinguished by the huntsmen into the *young wolf*, the *old wolf*, and the *great wolf*. They are known by the prints of their feet; the older the wolf, the larger the track he leaves. That of the female is narrower and longer than that of the male. It is necessary to have a good starter to put up the wolf; and it is even convenient to use every art to encourage him in his pursuit; for all dogs have a natural repugnance against this animal, and are but cold in their endeavours. When the wolf is once put up, it is then proper to have grey-hounds to let fly at him, in leashes, one after the other. The first leash is sent after him in the beginning, seconded by a man on horse-back; the second are let loose about half a mile farther, and the third when the rest of the dogs come up with, and begin to bait him. He for a long time keeps them off, stands his ground, threatens them on all sides, and often gets away; but usually the hunters arriving come in aid of the dog, and help to dispatch him with their cutlasses. When the animal is killed, the dogs testify no appetite to enjoy their victory, but leave him where he falls, a frightful spectacle, and even in death hideous.

The wolf is sometimes also hunted with harriers; but as he always goes straight forward,

forward, and often holds his speed for a whole day together, this kind of chace is tedious and disagreeable, at least if the harriers are not assisted by grey-hounds, who may harrafs him at every view. Several other arts have been also used to take and destroy this noxious animal. He is furrounded and wounded by men and large house-dogs; he is secured in traps; he is poisoned by carcases prepared and placed for that purpose, and is caught in pit-falls. "Gefner tells us of a friar, a woman, and a wolf, being taken in one of these, all in the same night. The woman lost her senses with the fright, the friar his reputation, and the wolf his life." All these disasters, however, do not prevent this animal's multiplying in great numbers, particularly in countries where the woods are plenty. France, Spain, and Italy, are greatly infested with them; but England, Ireland, and Scotland are happily set free.

King Edgar is said to be the first who attempted to rid this kingdom of such disagreeable inmates, by commuting the punishment for certain crimes into the acceptance of a number of wolf's tongues from each criminal*. However, some centuries after these animals were again encreased to such a degree, as to become the object of royal at-

* British Zoology, p. 62.

tention; accordingly Edward the First issued out his mandate to one Peter Corbet to superintend and assist in the destruction of them. They are said to have infested Ireland long after they were extirpated in England; however, the oldest men in that country remember nothing of these animals; and it is probable that there have been none there for more than a century past. Scotland also is totally free.

The colour of this animal differs according to the different climates where it is bred, and often changes even in the same country. Beside the common wolves, which are found in France and Germany, there are others with thicker hair, inclining to yellow. These are more savage and less noxious than the former, neither approaching the flocks nor habitations, and living rather by the chace than rapine. In the northern climates they are found some quite black, and some white all over. The former are larger and stronger than those of any other kinds.

The species is very much diffused in every part of the world, being found in Asia, Africa, and in America, as well as Europe. The wolves of Senegal resemble those of France, except that they are larger and much fiercer than those of Europe. Those of Egypt
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are smaller than those of Greece. In the east, the wolf is trained up for a shew, being taught to dance and play tricks ; and one of these thus educated often sells for four or five hundred crowns. “ It is said that in Lapland the wolf will never attack a reindeer that is seen haltered ; for this wary animal, being well acquainted with the nature of a trap, suspects one wherever it perceives a rope. However, when he sees the deer entirely at liberty, he seldom fails to destroy it.

“ The wolf of North America is blacker and much less than those in other parts of the world, and approaches nearer in form to the dog than those of the ordinary kind *. In fact, they were made use of as such by the savages till the Europeans introduced others ; and even now, on the remoter shores, or the more inland parts of the country, the savages still make use of these animals in hunting. They are very tame and gentle ; and those of this kind that are wild are neither so large nor so fierce as an European wolf, nor do they ever attack mankind. They go together in large packs by night to hunt the deer, which they do as well as any dogs in England ; and it is confidently assert-

* Brookes's Natural History, vol. i. p. 198.

ed that one of them is sufficient to run down a deer*. Whenever they are seen along the banks of those rivers near which the wandering natives pitch their huts, it is taken for granted that the bison or the deer are not far off; and the savages affirm that the wolves come with the tidings, in order to have the garbage, after the animal has been killed by the hunters. Catesby adds a circumstance relative to these animals, which, if true, invalidates many of Mr. Buffon's observations in the foregoing history. He asserts, that these being the only dogs used by the Americans, before the arrival of the Europeans among them, they have since engendered together, and that their breed has become prolific; which proves the dog and the wolf to be of the same species. It were to be wished that this fact were better ascertained; we should then know for a certainty in what degree the dog and the wolf resemble each other, as well in nature as in conformation; we might then, perhaps, be enabled to improve the breed of our dogs, by bringing them back to their native forms and instincts; we might, by crossing the strain, restore that race of those bold animals, which the ancients assure us were more than a match for the lion."

* Dictionnaire Raisonné. Loup.

However,



De Serodet.

J. M. Lodge sculp.

The Wolf.

However, this animal may be useful in North America; the wolf of Europe is a very noxious animal, and scarce any thing belonging to him is good, except his skin. Of this the furriers make a covering that is warm and durable, though coarse and unsightly. His flesh is very indifferent, and seems to be disliked by all other animals, no other creature being known to eat the wolf's flesh except the wolf himself. He breathes a most foetid vapour from his jaws, as his food is indiscriminate, often putrid, and seldom cleanly. In short, every way offensive, a savage aspect, a frightful howl, an insupportable odour, a perverse disposition, fierce habits, he is hateful while living, and useless when dead.

T H E F O X.

THE Fox very exactly resembles the wolf and the dog internally; and, although he differs greatly from both in size and carriage, yet when we come to examine his shapes minutely, there will appear to be very little difference in the description. Were, for instance, a painter to draw from a natural historian's exactest description the figure of a dog, a wolf and a fox, without having ever seen either, he would be very apt to confound all these animals together; or rather he would be unable to catch those peculiar

out-lines that no description can supply. Words will never give any person an exact idea of forms any way irregular; for although they be extremely just and precise, yet the numberless discriminations to be attended to will confound each other, and we shall no more conceive the precise form, than we should be able to tell when one pebble more was added or taken away from a thousand. To conceive, therefore, how the fox differs in form from the wolf or the dog, it is necessary to see all three, or at least to supply the defects of description by examining the difference in a print.

The fox is of a slenderer make than the wolf, and not near so large; for as the former is above three feet and a half long, so the other is not above two feet three inches. The tail of the fox also is longer in proportion and more bushy; its nose is smaller and approaching more nearly to that of the greyhound, and its hair softer. On the other hand, it differs from the dog in having its eyes obliquely situated, like those of the wolf; its ears are directed also in the same manner as those of the wolf, and its head is equally large in proportion to its size. It differs still more from the dog in its strong offensive smell, which is peculiar to the species, and often the cause of their death. However, some are ignorantly of opinion
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that it will keep off infectious diseases, and they preserve this animal near their habitations for that very purpose.

The fox has since the beginning been famous for his cunning and his arts, and he partly merits his reputation *. Without attempting to oppose either the dogs or the shepherds, without attacking the flock, or alarming the village, he finds an easier way to subsist, and gains by his address what is denied to his strength or courage. Patient and prudent, he waits the opportunity for depredation, and varies his conduct with every occasion. His whole study is his preservation; although nearly as indefatigable, and actually more swift than the wolf, he does not entirely trust to either, but makes himself an asylum, to which he retires in case of necessity; where he shelters himself from danger, and brings up his young.

As among men, those who lead a domestic life are more civilized and more endued with wisdom than those who wander from place to place, so, in the inferior ranks of animated nature, the taking possession of an home supposes a degree of instinct which others are without †. The choice of the situation for this domicile, the art of making it convenient, of hiding its entrance, and se-

* Buffon, Renard. † Ibid.

curing it against more powerful animals, are all so many marks of superior skill and industry. The fox is furnished with both, and turns them to his advantage. He generally keeps his kennel at the edge of the wood, and yet within an easy journey of some neighbouring cottage. From thence he listens to the crowing of the cock, and the cackling of the domestic fowls. He scents them at a distance; he seizes his opportunity, conceals his approaches, creeps slyly along, makes the attack, and seldom returns without his booty. If he be able to get into the yard, he begins by levelling all the poultry without remorse, and carrying off a part of the spoil, hides it at some convenient distance, and again returns to the charge. Taking off another fowl in the same manner, he hides that also, but not in the same place; and this he practises for several times together, until the approach of day, or the noise of the domestics, give him warning to retire. The same arts are practised when he finds birds entangled in springes laid for them by the fowler; the fox takes care to be beforehand, very expertly takes the bird out of the snare, hides it for three or four days, and knows very exactly when and where to return to avail himself of his hidden treasure. He is equally alert in seizing young hares and rabbits, before

fore they have strength enough to escape him, and when the old ones are wounded and fatigued he is sure to come upon them in their moments of distress, and to shew them no mercy. In the same manner he finds out birds nests, seizes the partridge and the quail while sitting, and destroys a large quantity of game. The wolf is most hurtful to the peasant, but the fox to the gentleman. In short, nothing that can be eaten seems to come amiss; rats, mice, serpents, toads, and lizards. He will, when urged by hunger, eat carrots and insects; and those that live near the sea-coasts, will, for want of other food, eat crabs, shrimps, and shell-fish. The hedge-hog in vain rolls itself up into a ball to oppose him, this determined glutton teizes it until it is obliged to appear uncovered, and then he devours it. The wasp and the wild bee are attacked with equal success. Although at first they fly out upon their invader, and actually oblige him to retire, this is but for a few minutes, until he has rolled himself upon the ground and thus crushed such as stick to his skin; he then returns to the charge, and at last, by perseverance, obliges them to abandon their combs; which he greedily devours, both wax and honey.

The chace of the fox requires less preparation than that of the wolf, and it is
also

also more pleasant and amusing. As dogs have a natural repugnance to pursue the wolf, so they are equally alert in following the fox; which chase they prefer even to that of the hare or the buck. The hunters, as upon other occasions, have their cant terms for every part of this chase. The fox the first year is called *a cub*; the second, *a fox*; and the third, an *old fox*; his tail is called the *brush* or *drag*, and his excrement the *billiting*. He is usually pursued by a large kind of harrier or hound, assisted by tarriers, or a smaller breed, that follow him into his kennel, and attack him there. The instant he perceives himself pursued, he makes to his kennel, and takes refuge at the bottom of it, where for a while he loses the cry of his enemies; but the whole pack coming to the mouth, redouble their vehemence and rage, and the little tarrier boldly ventures in. It often happens that the kennel is made under a rock, or among the roots of old trees; and in such cases the fox cannot be dug out, nor is the tarrier able to contend with him at the bottom of his hole. By this contrivance he continues secure; but when he can be dug out, the usual way is to carry him in a bag to some open country, and there set him loose before the hounds. The hounds
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and the men follow, barking and shouting wherever he runs ; and the body being strongly employed, the mind has not time to make any reflection on the futility of the pursuit. What adds to this entertainment is the strong scent which the fox leaves, that always keeps up a full cry ; although as his scent is stronger than that of the hare, it is much sooner evaporated. His shifts to escape when all retreat is cut off to his kennel are various and surprizing. He always chuses the most woody country, and takes those paths that are most embarrassed with thorns and briars. He does not double, nor use the unavailing shifts of the hare ; but flies in a direct line before the hounds, though at no very great distance ; manages his strength ; takes to the low and plashy grounds, where the scent will be less apt to lie ; and at last, when overtaken, he defends himself with desperate obstinacy, and fights in silence to the very last gasp.

The fox, though resembling the dog in many respects, is nevertheless very distinct in his nature, refusing to engender with it ; and though not testifying the antipathy of the wolf, yet discovering nothing more than indifference. This animal also brings forth fewer at a time than the dog, and that but once a year. Its litter is generally from four

to six, and seldom less than three. The female goes with young about six weeks, and seldom stirs out while pregnant, but makes a bed for her young, and takes every precaution to prepare for their production. When she finds the place of their retreat discovered, and that her young have been disturbed during her absence, she removes them one after the other in her mouth, and endeavours to find them out a place of better security. A remarkable instance of this animal's parental affection happened while I was writing this history, in the county of Essex. A she-fox that had, as it should seem, but one cub, was unkennelled by a gentleman's hounds, near Chelmsford, and hotly pursued. In such a case, when her own life was in imminent peril, one would think it was not a time to consult the safety of her young; however, the poor animal, braving every danger, rather than leave her cub behind to be worried by the dogs, took it up in her mouth, and ran with it in this manner for some miles. At last, taking her way through a farmer's yard, she was assaulted by a mastiff, and at last obliged to drop her cub, which was taken up by the farmer. I was not displeased to hear that this faithful creature escaped the pursuit, and at last got off in safety. The cubs of the
fox

fox are born blind, like those of the dog; they are eighteen months or two years in coming to perfection, and live about twelve or fourteen years.

As the fox makes war upon all animals, so all others seem to make war upon him. The dog hunts him with peculiar acrimony; the wolf is still a greater and more necessitous enemy, who pursues him to his very retreat. Some pretend to say that, to keep the wolf away, the fox lays at the mouth of its kennel a certain herb, to which the wolf has a particular aversion. This, which no doubt is a fable, at least shews that these two animals are as much enemies to each other as to all the rest of animated nature. But the fox is not hunted by quadrupedes alone; for the birds, who know him for their mortal enemy, attend him in his excursions, and give each other warning of their approaching danger. The daw, the magpye, and the black bird conduct him along, perching on the hedges as he creeps below, and, with their cries and notes of hostility, apprize all other animals to beware; a caution which they perfectly understand, and put into practice. The hunters themselves are often informed by the birds of the place of his retreat, and set the dogs into those thickets where they see them particularly
noisy

noisy and querulous. So that it is the fate of this petty plunderer to be detested by every rank of animals; all the weaker classes shun, and all the stronger pursue him.

The fox, of all wild animals, is most subject to the influence of climate; and there are found as many varieties in this kind almost as in any of the domestic animals *. The generality of foxes, as is well known, are red; but there are some, though not in England, of a greyish cast; and Mr. Buffon asserts that the tip of the tail in all foxes is white; which, however, is not so in those of this country. There are only three varieties of this animal in Great-Britain, and these are rather established upon a difference of size than of colour or form. The greyhound fox is the largest, tallest and boldest; and will attack a grown sheep. The mastiff fox is less, but more strongly built. The cur fox is the least and most common; he lurks about hedges and out-houses, and is the most pernicious of the three to the peasant and farmer.

In the colder countries round the pole, the foxes are of all colours; black, blue, grey, iron grey, silver grey, white, white with red legs, white with black heads, white with the tip of the tail black, red with the

* Buffon, Renard.



De Savordel.

Jn. P. Lodge sculp.

The Fox.

throat and belly entirely white, and lastly with a stripe of black running along the back, and another crossing it at the shoulders*. The common kind, however, is more universally diffused than any of the former, being found in Europe, in the temperate climates of Asia, and also in America; they are very rare in Africa, and in the countries lying under the torrid zone. Those travellers who talk of having seen them at Calicut, and other parts of Southern India, have mistaken the jackall for the fox. The fur of the white fox is held in no great estimation, because the hair falls off; the blue fox skins are also bought up with great avidity, from their scarceness; but the black fox skin is of all others the most esteemed, a single skin often selling for forty or fifty crowns. The hair of these is so disposed, that it is impossible to tell which way the grain lies; for if we hold the skin by the head the hair hangs to the tail, and if we hold it by the tail it hangs down equally smooth and even to the head. These are often made into men's muffs, and are at once very beautiful and warm. In our temperate climate, however, furs are of very little service, there being scarce any weather so severe in England from which our ordinary cloaths may not very well defend us.

* Buffon, Renard.

THE JACKALL.

THE Jackall is one of the commonest wild animals in the whole East; and yet there is scarce any less known in Europe, or more confusedly described by natural historians. In general, we are assured that it resembles the fox in figure and disposition, but we are still ignorant of those nice distinctions by which it is known to be a different species. It is said to be of the size of a middling dog, resembling the fox in the hinder parts, particularly the tail; and the wolf in the fore-parts, especially the nose. Its legs are shorter than those of the fox, and its colour is of a bright yellow, or sorrel, as we express it in horses. This is the reason it has been called in Latin the Golden Wolf; a name, however, which is entirely unknown in the countries where they are most common.

The species of the jackall is diffused all over Asia, and is found also in most parts of Africa, seeming to take up the place of the wolf, which in those countries is not so common. There seem to be many varieties among them; those of the warmest climates appear to be the largest, and their colour is rather of a reddish brown than of that beautiful yellow by which the smaller jackalls are chiefly distinguished.

Although

Although the species of the wolf approaches very near to that of the dog, yet the jackall seems to be placed between them; to the savage fierceness of the wolf it adds the impudent familiarity of the dog*. Its cry is an howl, mixed with barking, and a lamentation resembling that of human distress. It is more noisy in its pursuits even than the dog, and more voracious than the wolf. The jackall never goes alone, but always in a pack of forty or fifty together. These unite regularly every day to form a combination against the rest of the forest. Nothing then can escape them; they are content to take up with the smallest animals; and yet, when thus united, they have courage to face the largest. They seem very little afraid of mankind; but pursue their game to their doors, without testifying either attachment or apprehension. They enter insolently into the sheep-folds, the yards, and the stables, and, when they can find nothing else, devour the leather harness, boots, and shoes, and run off with what they have not time to swallow.

They not only attack the living but the dead. They scratch up with their feet the new made graves, and devour the corpse how putrid soever. In these countries there-

* Buffon, vol. xxvii. p. 52.

fore where they abound, they are obliged to beat the earth over the grave, and to mix it with thorns, to prevent the jackalls from scraping it away. They always assist each other as well in this employment of exhumation as in that of the chase. While they are at this dreary work, they exhort each other by a most mournful cry, resembling that of children under chastisement; and when they have thus dug up the body, they share it amicably between them. These, like all other savage animals, when they have once tasted of human flesh, can never after refrain from pursuing mankind. They watch the burying grounds, follow armies, and keep in the rear of caravans. They may be considered as the vulture of the quadrupede kind; every thing that once had animal life, seems equally agreeable to them; the most putrid substances are greedily devoured; dried leather, and any thing that has been rubbed with grease, how insipid soever in itself, is sufficient to make the whole go down.

They hide themselves in holes by day, and seldom appear abroad till night-fall, when the jackall that has first hit upon the scent of some larger beast gives notice to the rest by an howl, which it repeats as it runs; while

while all the rest, that are within hearing, pack in to its assistance. The gazelle, or whatever other beast it may be, finding itself pursued, makes off towards the houses and the towns; hoping, by that means, to deter its pursuers from following: but hunger gives the jackall the same degree of boldness that fear gives the gazelle, and it pursues even to the verge of the city, and often along the streets. The gazelle, however, by this means, most frequently escapes; for the inhabitants rallying out, often disturb the jackall in the chase; and as it hunts by the scent, when once driven off, it never recovers it again. In this manner we see how experience prompts the gazelle, which is naturally a very timid animal, and particularly fearful of man himself, to take refuge near him, considering him as the least dangerous enemy, and often escaping by his assistance.

But man is not the only intruder upon the jackall's industry and pursuits. The lion, the tiger, and the panther, whose appetites are superior to their swiftness, attend to its call, and follow in silence at some distance behind*. The jackall pursues the whole night with unceasing assiduity, keeping up the cry, and with great perseverance at last

* Linnæi Systema, p. 60.

tires down its prey ; but juſt at the moment it ſuppoſes itſelf going to ſhare the fruits of its labour, the lion or the leopard comes in, ſatiates himſelf upon the ſpoil, and his poor provider muſt be content with the bare carcaſs he leaves behind. It is not to be wondered at, therefore, if the jackall be voracious, ſince it ſo ſeldom has a ſufficiency ; nor that it feeds on putrid ſubſtances, ſince it is not permitted to feaſt on what it has newly killed. Beſide theſe enemies, the jackall has ſtill another to cope with, for between him and the dog there is an irreconcilable antipathy, and they never part without an engagement. The Indian peaſants often chaſe them as we do foxes ; and have learned, by experience, when they have got a lion or a tiger in their rear. Upon ſuch occaſions they keep their dogs cloſe, as they would be no match for ſuch formidable animals, and endeavour to put them to flight with their cries. When the lion is diſmiſſed, they more eaſily cope with the jackall, who is as ſtupid as it is impudent, and ſeems much better fitted for purſuing than retreating. It ſometimes happens that one of them ſteals ſilently into an outhouſe, to ſeize the poultry, or devour the furniture, but hearing others in full cry without at a diſtance, without

without thought, it instantly answers the call, and thus betrays its own depredations. The peasants sally out upon it, and the foolish animal finds, too late, that its instinct was too powerful for its safety.

T H E I S A T I S.

AS the jackall is a sort of intermediate species between the dog and the wolf*, so the isatis may be considered as placed between the dog and the fox. This animal has hitherto been supposed to be only a variety of the latter; but from the latest observations, there is no doubt of their being perfectly distinct. The isatis is very common in all the northern countries bordering upon the icy sea; and is seldom found, except in the coldest countries. It extremely resembles a fox, in the form of its tail; and a dog, in the make of its head, and the position of its eyes. The hair of these animals is softer than that of a common fox; some are blue, some are white at one season, and at another of a russet brown. Although the whole of its hair be two inches long, thick, tufted and glossy, yet the under jaw is en-

* In this description I have followed Mr. Buffon.

tirely without any, and the skin appears bare in that part.

This animal can bear only the coldest climates, and is chiefly seen along the coasts of the icy sea, and upon the banks of the great rivers that discharge themselves therein. It is chiefly fond of living in the open country, and seldom seen in the forest, being mostly found in the mountainous and naked regions of Norway, Siberia, and Lapland. It burrows, like the fox; and when with young, the female retires to her kennel, in the same manner as the fox is seen to do. These holes, which are very narrow, and extremely deep, have many out-lets. They are kept very clean, and are bedded at the bottom with moss, for the animal to be more at its ease. Its manner of coupling, time of gestation, and number of young, are all similar to what is found in the fox; and it usually brings forth at the end of May, or the beginning of June.

Such are the particulars in which this animal differs from those of the dog kind, and in which it resembles them: but its most striking peculiarity remains still to be mentioned namely, its changing its colour, and being seen at one time, brown, and at another perfectly white. As was already said, some are naturally blue, and their colour never changes; but such as are to be white,
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are, when brought forth, of a yellow hue, which in the beginning of September, is changed to white, all except along the top of the back, along which runs a stripe of brown, and another crossing it down the shoulders, at which time the animal is called the *cross fox*; however, this brown cross totally disappears before winter, and then the creature is all over white, and its fur is two inches long: this, about the beginning of May, again begins to fall; and the molting is completed about the middle of July, when the isatis becomes brown once more. The fur of this animal is of no value, unless it be killed in winter.

T H E H Y Æ N A.

THE hyæna is the last animal I shall mention among those of the dog kind, which it in many respects resembles, although too strongly marked to be strictly reduced to any type. The hyæna is nearly of the size of a wolf; and has some similitude to that animal in the shape of its head and body. The head, at first sight, does not appear to differ, except that the ears of the hyæna are longer, and more without hair; but, upon observing more closely, we shall find the head broader, the nose flatter, and not so pointed.

pointed. The eyes are not placed obliquely, but more like those of a dog. The legs, particularly the hinder, are longer than those either of the dog or the wolf, and different from all other quadrupedes whatsoever, in having but four toes, as well on the fore feet as on the hinder. Its hair is of a dirty greyish, marked with black, disposed in waves down its body. Its tail is short, with pretty long hair; and immediately under it, above the anus, there is an opening into a kind of glandular pouch, which separates a substance of the consistence, but not of the odour, of civet. This opening might have given arise to the error of the ancients, who asserted, that this animal was every year, alternately, male and female. Such are the most striking distinctions of the hyæna, as given her by naturalists; which, nevertheless, convey but a very confused idea of the peculiarity of its form. Its manner of holding the head seems remarkable; somewhat like a dog, pursuing the scent, with the nose near the ground. The head being held thus low, the back appears elevated, like that of the hog, which, with a long bristly band of hair that runs all along, gives it a good deal the air of that animal; and, it is probable that, from this similitude it first took its name, the word *houina* being Greek,

Greek, and derived from *bus*, which signifies a sow.

But no words can give an adequate idea of this animal's figure, deformity, and fierceness. More savage and untameable than any other quadrupede, it seems to be forever in a state of rage or rapacity, for ever growling, except when receiving its food. Its eyes then glisten, the bristles of its back all stand upright, its head hangs low, and yet its teeth appear; all which give it a most frightful aspect, which a dreadful howl tends to heighten. This, which I have often heard, is very peculiar: its beginning resembles the voice of a man moaning, and its latter part as if he were making a violent effort to vomit. As it is loud and frequent, it might, perhaps have been sometimes mistaken for that of a human voice in distress, and have given rise to the accounts of the ancients, who tell us, that the hyæna makes its moan, to attract unwary travellers, and then to destroy them: however this be, it seems the most untractable, and, for its size, the most terrible of all other quadrupedes; nor does its courage fall short of its ferocity; it defends itself against the lion, is a match for the panther, and attacks the ounce, that it seldom fails to conquer.

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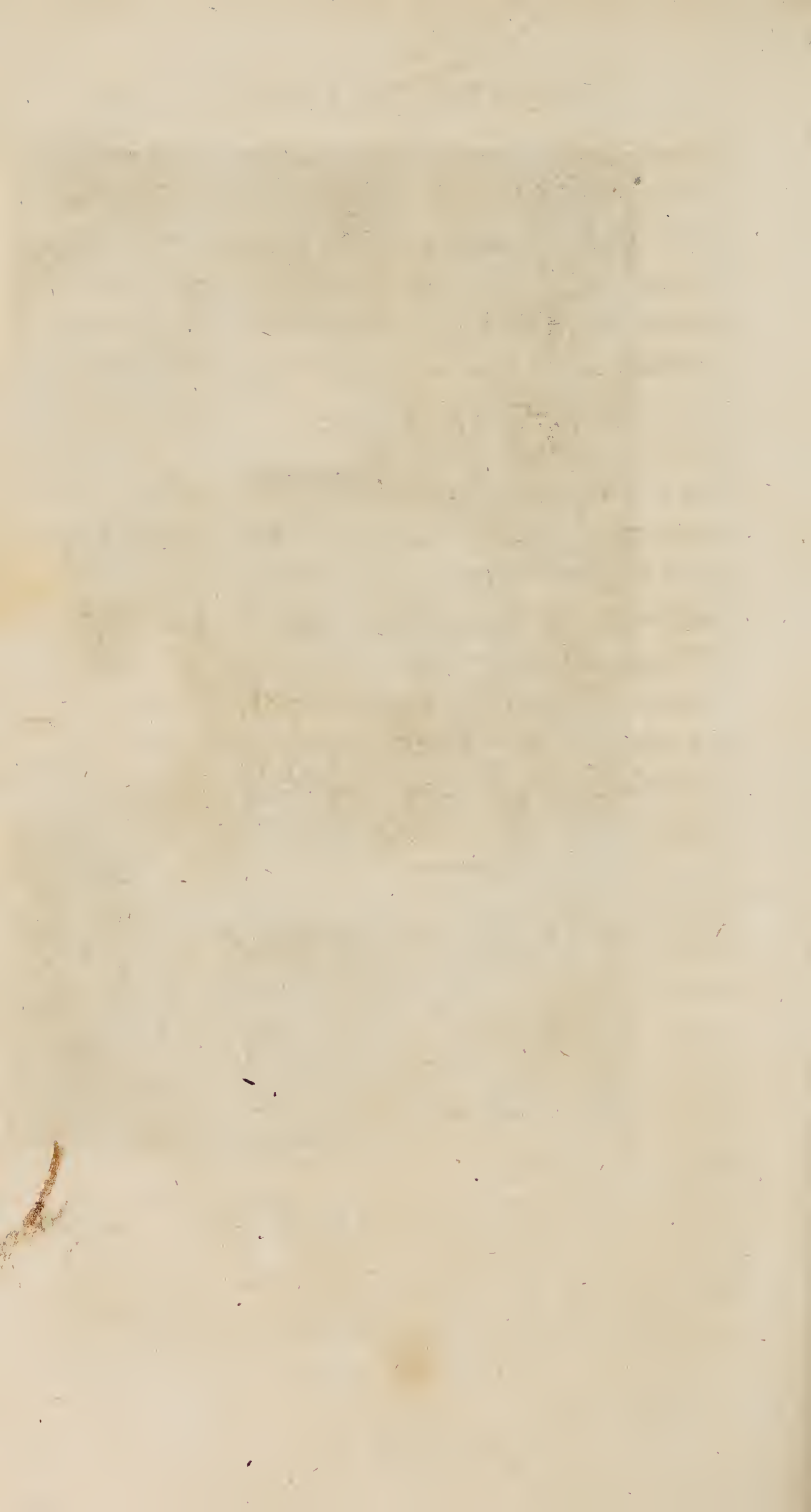
It is an obscene and solitary animal, to be found chiefly in the most desolate and uncultivated parts of the torrid zone, of which it is a native*. It resides in the caverns of mountains, in the clefts of rocks, or in dens that it has formed for itself under the earth. Though taken ever so young, it cannot be tamed; it lives by depredation, like the wolf, but is much stronger, and more courageous. It sometimes attacks man, carries off cattle, follows the flock, breaks open the sheep cots by night, and ravages with insatiable voracity. Its eyes shine by night; and it is asserted, not without great appearance of truth, that it sees better by night than by day. When destitute of other provision, it scrapes up the graves, and devours the dead bodies, how putrid soever. To these dispositions, which are sufficiently noxious and formidable, the ancients have added numberless others, which are long since known to be fables: as, for instance, that the hyæna was male and female alternately; that having brought forth and suckled its young, it then changed sexes for a year, and became a male. This, as was mentioned above, could only proceed from the opening under the tail, which all animals of this species are found to have; and which is found in the same manner in no other quadrupede,



De Savodol.

J. M. Lodge sculp.

The Hyæna.



quadrupede, except the badger. There is, in the weasel kind indeed, an opening, but it is lower down, and not placed above the anus, as in the badger and the hyæna. Some have said that this animal changed the colour of its hair at will; others, that a stone was found in its eye, which, put under a man's tongue, gave him the gift of prophecy; some have said that he had no joints in the neck, which, however, all quadrupedes are known to have; and some, that the shadow of the hyæna kept dogs from barking. These, among many other absurdities, have been asserted of this quadrupede; and which I mention to shew the natural disposition of mankind, to load those that are already but too guilty, with accumulated reproach.

C H A P. I X.

Of Animals of the Weasel Kind.

HAVING described the bolder ranks of carnivorous animals, we now come to a minuter and more feeble class, less formidable indeed than any of the former, but far more numerous, and, in proportion to their size, more active and enterprizing. The weasel kind may be particularly distinguished from other carnivorous animals, by the length and slenderness of their bodies, which are so fitted as to wind, like worms, into very small openings, after their prey; and hence also they have received the name of vermin, from their similitude to the worm in this particular. These animals differ from all of the cat kind, in the formation and disposition of their claws, which, as in the dog kinds, they can neither draw in nor extend at pleasure, as cats are known to do. They differ from the dog kind, in being cloathed rather with fur than hair; and although some varieties of the fox may resemble them in this particular, yet the coat of the latter is longer, stronger, and always more resembling hair. Beside these distinctions, all
animals

animals of the weasel kind have glands placed near the anus, that either open into it, or beneath it, furnishing a substance that, in some, has the most offensive smell in nature, in others, the most pleasing perfume. All of this kind are still more marked by their habitudes and dispositions, than their external form; cruel, voracious, and cowardly, they subsist only by theft, and find their chief protection in their minuteness. They are all, from the shortness of their legs, slow in pursuit; and, therefore, owe their support to their patience, assiduity, and cunning. As their prey is precarious, they live a long time without food; and if they happen to fall in where it is in plenty, they instantly destroy all about them before they begin to satisfy their appetite, and suck the blood of every animal before they begin to touch its flesh.

These are the marks common to this kind, all the species of which have a most striking resemblance to each other; and he that has seen one, in some measure, may be said to have seen all. The chief distinction in this numerous class of animals, is to be taken from the size; for no words can give the minute irregularities of that outline by which one species is to be distinguished from that which is next it. I will begin,

begin, therefore, with the least and the best known of this kind, and still marking the size, will proceed gradually to larger and larger, until we come from the weasel to the glutton, which I take to be the largest of all. The weasel will serve as a model for all the rest; and indeed, the points in which they differ from this little animal, are but very inconsiderable.

The Weasel*, as was said, is the smallest of this numerous tribe; its length not exceeding seven inches, from the tip of the nose to the insertion of the tail. This length, however, seems to be very great, if we compare it with the height of the animal, which is not above an inch and an half. In measuring the wolf, we find him to be not above once and an half as long as he is high; in observing the weasel, we find it near five times as long as it is high, which shews an amazing disproportion. The tail also, which is bushy, is two inches and an half long, and adds to the apparent length of this little animal's body. The colour of the weasel is of a bright red on the back and sides, but white under the throat and the belly. It has whiskers like a cat; and thirty-two teeth, which is two more than any of the cat kind;

* British Zoology, vol. i. p. 83.

and these also seem better adapted for tearing and chewing, than those of the cat kind are. The eyes are little and black. The ears short, broad, and roundish; and have a fold at the lower part, which makes them look as if they were double. Beneath the corners of the mouth, on each jaw, is a spot of brown.

This animal, though very diminutive to appearance, is, nevertheless, a very formidable enemy to quadrupedes an hundred times its own size. It is very common and well known in most parts of this country; but seems held in very different estimation, in different parts of it. In those places where sheep or lambs are bred, the weasel is a most noxious inmate, and every art is used to destroy it; on the contrary, in places where agriculture is chiefly followed, the weasel is considered as a friend that thins the number of such vermin as chiefly live upon corn: however, in all places, it is one of the most untameable and untractable animals in the world*. When kept in the cage, either for the purposes of amusement or inspection, it will not touch any part of its victuals while any body looks on. It keeps in a continual agitation, and seems frightened so much at the sight of mankind, that it will die, if not permitted to hide itself from their presence.

* Buffon, vol. xv. p. 37.

For this purpose, it must be provided, in its cage, with a sufficient quantity of wool or hay, in which it may conceal itself, and where it may carry whatever it has got to eat; which, however, it will not touch until it begins to putrefy. In this state it is seen to pass three parts of the day in sleeping; and reserves the night for its time of exercise and eating.

In its wild state, the night is likewise the time during which it may be properly said to live. At the approach of evening, it is seen stealing from its hole, and creeping about the farmer's yard for its prey. If it enters the place where poultry are kept, it never attacks the cocks or the old hens, but immediately aims at the young ones. It does not eat its prey on the place, but, after killing, it by a single bite near the head, and with a wound so small that the place can scarcely be perceived, it carries it off to its young, or its retreat. It also breaks and sucks the eggs, and sometimes kills the hen that attempts to defend them. It is remarkably active; and in a confined place, scarce any animal can escape it. It will run up the sides of walls with such facility; that no place is secure from it; and its body is so small, that there is scarce any hole but what it can wind through.

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During the summer, its excursions are more extensive ; but in winter, it chiefly confines itself in barns and farm-yards, where it remains till spring, and where it brings forth its young. All this season it makes war upon the rats and mice, with still greater success than the cat ; for being more active and slender, it pursues them into their holes, and, after a short resistance, destroys them. It creeps also into pigeon-holes, destroys the young, catches sparrows, and all kind of small birds ; and, if it has brought forth its young, hunts with still greater boldness and avidity. In summer, it ventures farther from the house ; and particularly goes into those places where the rat, its chiefest prey, goes before it. Accordingly, it is found in the lower grounds, by the side of waters, near mills, and often is seen to hide its young in the hollow of a tree.

The female takes every precaution to make an easy bed for her little ones : she lines the bottom of her hole with grass, hay, leaves, and moss, and generally brings forth from three to five at a time. All animals of this, as well as those of the dog kind, bring forth their young with closed eyes ; but they very soon acquire strength sufficient to follow the dam in her excursions, and assist in her projects of petty rapine. The
weasel,

weasel, like all others of its kind, does not run on equably, but moves by bounding; and when it climbs a tree, by a single spring it gets a good way from the ground. It jumps in the same manner upon its prey; and, having an extremely limber body, evades the attempts of much stronger animals to seize it.

This animal, like all of its kind, has a very strong smell; and that of the weasel is peculiarly foetid. This scent is very distinguishable in those creatures, when they void their excrement; for the glands which furnish this foetid substance, which is of the consistence of suet, open directly into the orifice of the anus, and taint the excrement with the strong effluvia. The weasel smells more strongly in summer than in winter; and more abominably when irritated or pursued, than when at its ease. It always preys in silence, and never has a cry except when struck, and then it has a rough kind of squeaking, which at once expresses resentment and pain. Its appetite for animal food never forsakes it; and it seems even to take a pleasure in the vicinity of putrefaction. Mr. Buffon tells us of one of them being found with three young ones, in the carcass of a wolf that was grown putrid, and that had been hung up, by the hind legs, as a ter-

ror to others. Into this horrid retreat the weasel thought proper to retire to bring forth her young; she had furnished the cavity with hay, grafs and leaves; and the young were just brought forth when they were discovered by a peasant passing that way.

THE ERMINE, OR STOAT,

NEXT to the weasel in size, and perfectly alike in figure, is the Ermine. The difference between this and the former animal is so very small, that many, and among the rest Linnæus, who gives but one description of both, have confounded the two kinds together. However their differences are sufficient to induce later naturalists to suppose the two kinds distinct; and as their lights seem preferable, we chuse to follow their descriptions*.

The stoat, or ermine, differs from the weasel in size, being usually nine inches long; whereas the former is not much above six. The tail of the ermine is always tipped with black, and is longer in proportion to the body, and more furnished with hair. The edges of the ears and the ends of the toes in this animal are of a yellowish white; and although it is of the same colour with the

* Buffon, British Zoology.

weasel, being of a lightish brown, and though both this animal, as well as the weasel, in the most northern parts of Europe, changes its colour in winter, and becomes white; yet even then the weasel may be easily distinguished from the ermine by the tip of the tail, which in the latter is always black.

It is well known that the fur of the ermine is the most valuable of any hitherto known; and it is in winter only that this little animal has it of the proper colour and consistence. In summer, the ermine, as was said before, is brown, and it may at that time more properly be called the stoat. There are few so unacquainted with quadrupedes as not to perceive this change of colour in the hair, which in some degree obtains in them all. The horse, the cow, and the goat, all manifestly change colour in the beginning of summer, the old long hair falling off, and a shorter coat of hair appearing in its room, generally of a darker colour, and yet more glossy. What obtains in our temperate climate, is seen to prevail still more strongly in those regions where the winters are long and severe, and the summers short and yet generally hot in an extreme degree. The animal has strength enough during that season, to throw off a warm coat of fur, which would but incommode it, and continues for two

or three months in a state somewhat resembling the ordinary quadrupedes of the milder climates. At the approach of winter, however, the cold encreasing, the coat of hair seems to thicken in proportion; from being coarse and short it lengthens and grows finer, while multitudes of smaller hairs grow up between the longer, thicken the coat, and give it all that warmth and softness which are so much valued in the furs of the northern animals.

It is no easy matter to account for this remarkable warmth of the furs of northern quadrupedes, or how they come to be furnished with such an abundant covering. It is easy enough, indeed, to say that Nature fits them thus for the climate; and, like an indulgent mother, when she exposes them to the rigour of an intemperate winter, supplies them with a covering against its inclemency. But this is only flourishing; it is not easy, to tell how Nature comes to furnish them in this manner. A few particulars on this subject are all that we yet know. It is observable among quadrupedes, as well even among the human species itself, that a thin sparing diet is apt to produce hair; children that have been ill fed, famished dogs and horses, are more hairy than others whose food has been more plentiful. This may,

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therefore, be one cause that the animals of the north, in winter, are more hairy than those of the milder climates. At that season, the whole country is covered with deep snow, and the provisions which these creatures are able to procure can be but precarious and scanty. Its becoming finer may also proceed from the severity of the cold, that contracts the pores of the skin, and the hair consequently takes the shape of the aperture through which it grows, as wires are made smaller by being drawn through a smaller orifice. However this may be, all the animals of the artic climates may be said to have their winter and summer garments, except very far to the north, as in Greenland, where the cold is so continually intense and the food so scarce, that neither the bears nor foxes change colour at all*.

The ermine, as was said, is remarkable among these for the softness, the closeness, and the warmth of its fur. It is brown in summer, like the weasel, and changes colour before the winter is begun, becoming a beautiful cream colour, all except the tip of the tail, as was said before, which still continues black. Mr. Daubenton had one of these brought him with its white winter fur, which he put into a cage and kept, in order

* Krantz's History of Greenland, vol. i. p. 72.

to observe the manner of moulting its hair. He received it in the beginning of March, and in a very short time it began to shed its coat, and a mixture of brown was seen to prevail among the white, so that at the ninth of the same month its head was nearly become of a reddish brown. Day after day this colour appeared to extend at first along the neck and down the back, in the manner of a stripe of about half an inch broad. The fore-part of the legs then assumed the same colour; a part of the head, the thighs, and the tail, were the last that changed; but at the end of the month there was no white remaining, except on those parts which are always white in this species, particularly the throat and the belly. However, he had not the pleasure of seeing this animal resume its former whiteness, although he kept it for above two years; which, without doubt, was owing to its imprisoned state; this colour being partly owing to its stinted food, and partly to the rigour of the season. During its state of confinement, this little animal always continued very wild and untractable; for ever in a state of violent agitation, except when asleep, which it often continued for three parts of the day. Except for its most disagreeable scent, it was an extremely pretty creature, its eyes sprightly,

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its phyfiognomy pleasant, and its motions so swift that the eye could scarce attend them. It was fed with eggs and flesh, but it always let them putrify before it touched either. As some of this kind are known to be fond of honey, it was tried to feed this animal with such food for a while; after having for three or four days deprived it of other food, it eat of this, and died shortly after; a strong proof of its being a distinct species from the pole cat or the martin, who feed upon honey, but otherwise pretty much resemble the ermine in their figure and dispositions.

In the north of Europe and Siberia, their skins make a valuable article of commerce, and they are found there much more frequently than among us. In Siberia they burrow in the fields, and are taken in traps baited with flesh. In Norway they are either shot with blunt arrows or taken in traps made of two flat stones, one being propped with a stick, to which is fastened a baited string, which when the animals attempt to pull away, the stone drops and crushes them to death. This animal is sometimes found white in Great Britain, and is then called a white weasel. Its furs, however, among us are of no value, having neither the thickness, the closeness, nor the whiteness of those

those which come from Siberia. The fur of the ermine, in every country, changes by time; for, as much of its beautiful whiteness is given it by certain art known to the furriers, so its natural colour returns, and its former whiteness can never be restored again.

T H E F E R R E T.

THE animal next in size to the ermine, is the ferret; which is a kind of domestic in Europe, though said to be originally brought from Africa into Spain, which being a country abounding in rabbits, required an animal of this kind, more than any other: however this be, it is not to be found at present among us except in its domestic state; and it is chiefly kept tame, for the purposes of the warren.

The ferret is about one foot long, being nearly four inches longer than the weasel. It resembles that animal in the slenderness of its body, and the shortness of its legs; but its nose is sharper, and its body more slender, in proportion to its length. The ferret is commonly of a cream colour; but they are also found of all the colours of the weasel kind; white, blackish, brown and party-coloured. Those that are of the whitish kind, have their eyes red, as is almost general with all
animals

animals entirely of that colour. But its principal distinction from the weasel, is the length of the hair on its tail, which is much longer in the ferret than the weasel. Words will not well express the other distinctions; and what might take up a page in dull discrimination, a single glance of the eye, when the animals themselves are presented, can discover.

As this animal is a native of the torrid zone*, so it cannot bear the rigours of our climate, without care and shelter; and it generally repays the trouble of its keeping, by its great agility in the warren. It is naturally such an enemy of the rabbit kind, that if a dead rabbit be presented to a young ferret, although it has never seen one before, it instantly attacks and bites it with an appearance of rapacity. If the rabbit be living, the ferret is still more eager, seizes it by the neck, winds itself round it, and continues to suck its blood, till it be satiated.

Their chief use in warrens, is to enter the holes, and drive the rabbits into the nets that are prepared for them at the mouth. For this purpose, the ferret is muzzled; otherwise, instead of driving out the rabbit, it would content itself with killing and
sucking

* Buffon.

sucking its blood at the bottom of the hole ; but, by this contrivance, being rendered unable to seize its prey, the rabbit escapes from its claws, and instantly makes to the mouth of the hole with such precipitation, that it is inextricably entangled in the net placed there for its reception. It often happens, however, that the ferret disengages itself of its muzzel, and then it is most commonly lost, unless it be dug out ; for, finding all its want satisfied in the warren, it never thinks of returning to the owner, but continues to lead a rapacious solitary life while the summer continues, and dies with the cold of the winter. In order to bring the ferret from his hole, the owners burn straw and other substances at the mouth ; they also beat above, to terrify it ; but this does not always succeed ; for as there are several issues to each hole, the ferret is affected neither by the noise or the smoke, but continues secure at the bottom, sleeping the greatest part of the time, and waking only to satisfy the calls of hunger.

The female of this species*, is sensibly less than the male, whom she seeks with great ardour, and, it is said, often dies, without being admitted. They are usually kept in boxes, with wool, of which they

* Buffon.

make themselves a warm bed, which serves to defend them from the rigour of the climate. They sleep almost continually ; and the instant they awake, they seem eager for food. They are usually fed with bread and milk, and they breed twice a year. Some of them devour their young as soon as brought forth ; and then they become fit for the male again. Their number is usually from five to six at a litter ; and this is said to consist of more females than males. Upon the whole, this is an useful, but a disagreeable and offensive animal ; its scent is foetid, its nature voracious, it is tame without any attachment, and such is its appetite for blood, that it has been known to attack and kill children in the cradle. It is very easy to be irritated ; and, although at all times its smell is very offensive, it then is much more so ; and its bite is very difficult of cure.

To the ferret kind we may add an animal which Mr. Buffon calls the Vanfire, the skin of which was sent him stuffed, from Madagascar. It is thirteen inches long, a good deal resembling the ferret in figure, but differing in the number of its grinding teeth, which amounted to twelve ; whereas, in the ferret, there are but eight : it differed also in colour, being of a dark brown,

brown, and exactly the same on all parts of its body. Of this animal, so nearly resembling the ferret, we have no other history but the mere description of its figure ; and in a quadrupede whose kind is so strongly marked, perhaps this is sufficient to satisfy curiosity.

THE POLECAT.

THE Polecat is larger than the weasel, the ermine, or the ferret, being one foot five inches long ; whereas, the weasel is but six inches, the ermine nine, and the ferret eleven inches. It so much resembles the ferret in form, that some have been of opinion they were one and the same animal ; nevertheless, there are a sufficient number of distinctions between them : it is, in the first place, larger than the ferret ; it is not quite so slender, and has a blunter nose ; it differs also internally, having but fourteen ribs, whereas the ferret has fifteen ; and wants one of the breast bones, which is found in the ferret : however, warreners assert, that the pole-cat will mix with the ferret ; and they are sometimes obliged to procure an intercourse between these two animals, to improve the breed of the latter, which, by long confinement, is sometimes seen to abate

abate of its rapacious disposition. Mr. Buffon denies that the ferret will admit the polecat; yet gives a variety, under the name of both animals, which may very probably be a spurious race between the two.

However this be, the polecat seems by much the more pleasing animal of the two; for although the long slender shape of all these vermin tribes gives them a very disagreeable appearance, yet the softness and colour of the hair in some of them, atones for the defect, and renders them, if not pretty, at least not frightful. The polecat, for the most part, is of a deep chocolate colour; it is white about the mouth; the ears are short, rounded, and tipped with white; a little beyond the corners of the mouth a stripe begins, which runs backward, partly yellow: its hair, like that of all this class, is of two sorts; the long and the furry: but, in this animal, the two kinds are of different colours; the longest is black, and the shorter yellowish*: the throat, feet and tail, are blacker than any other parts of the body: the claws are white underneath, and brown above; and its tail is about two inches and an half.

* Ray's Synopsis.

It is very destructive to young game of all kinds*: but the rabbit seems to be its favourite prey; a single polecat is often sufficient to destroy a whole warren; for, with that insatiable thirst for blood which is natural to all the weasel kind, it kills much more than it can devour; and I have seen twenty rabbits at a time taken out dead, which they had destroyed, and that by a wound which was hardly perceptible. Their size, however, which is so much larger than the weasel, renders their retreats near houses much more precarious; although I have seen them burrow near a village, so as scarcely to be extirpated. But, in general, they reside in woods or thick brakes, making holes underground of about two yards deep, commonly ending among the roots of large trees, for greater security. In winter they frequent houses, and make a common practice of robbing the hen-roost and dairy.

The polecat is particularly destructive among pigeons†, when it gets into a dove-house; without making so much noise as the weasel, it does a great deal more mischief; it dispatches each with a single wound in the head; and, after killing a great number, and satiating itself with their blood, it then begins to think of carrying them

* British Zoology, vol. i. p. 78. * Buffon.

home. This it carefully performs, going and returning, and bringing them one by one to its hole; but if it should happen that the opening by which it got into the dove-house be not large enough for the body of the pigeon to get through, this mischievous creature contents itself with carrying away the heads, and makes a most delicious feast upon the brains.

It is not less fond of honey, attacking the hives in winter, and forcing the bees away. It does not remove far from houses in winter, as its prey is not so easily found in the woods during that season. The female brings forth her young in summer, to the number of five or six at a time; these she soon trains to her own rapacious habits, supplying the want of milk, which no carnivorous quadrupede has in plenty, with the blood of such animals as she happens to seize. The fur of this animal is considered as soft and warm; yet it is in less estimation than some of a much inferior kind, from its offensive smell, which can never be wholly removed, or suppressed. The polecat seems to be an inhabitant of the temperate climates *, scarce any being found towards the north, and but very few in the warmer la-

* Buffon.

titudes. The species appears to be confined in Europe, from Poland to Italy. It is certain, that these animals are afraid of the cold, as they are often seen to come into houses in winter, and as their tracks are never found in the snow, near their retreats. It is probable, also, that they are afraid of heat, as they are but thinly scattered in the southern climates.

T H E M A R T I N.

THE Martin is a larger animal than any of the former, being generally eighteen inches long, and the tail ten more. It differs from the polecat, in being about four or five inches longer in proportion, and more bushy at the end; its nose is flatter; its cry is sharper and more piercing; its colours are more elegant; and, what still adds to their beauty, its scent, very unlike the former, instead of being offensive, is considered as a most pleasing perfume. The martin, in short, is the most beautiful of all British beasts of prey: its head is small, and elegantly formed; its eyes lively; its ears are broad, rounded and open; its back, its sides, and tail, are covered with a fine thick downy fur, with longer hair intermixed; the roots are ash colour, the middle of a bright chestnut,

nut, the points black; the head is brown, with a slight cast of red; the legs, and upper sides of the feet, are of a chocolate colour; the palms, or under sides, are covered with a thick down, like that of the body; the feet are broad, the claws white, large and sharp, well adapted for the purposes of climbing, but, as in the others of the weasel kind, incapable of being sheathed or unsheathed at pleasure; the throat and breast are white; the belly of the same colour with the back, but rather paler; the hair on the tail is very long, especially at the end, where it appears much thicker than near the insertion.

There is also a variety of this animal, called the yellow breasted martin, which in no respect differs from the former, except that this has a yellow breast, whereas the other has a white one: the colour of the body also is darker; and, as it lives more among trees than the other martin, its fur is more valuable, beautiful and glossy. The former of these Mr. Buffon calls the Fouine; the latter, simply the Martin; and he supposes them to be distinct species: but as they differ only in colour, it is unnecessary to embarrass history by a new distinction, where there is only so minute a difference.

Of



Do Sweden.

J. N. Lodge sculp

The Pole Cat.

Of all animals of the weasel kind, the martin is the most pleasing; all its motions shew great grace, as well as agility; and there is scarce an animal in our woods that will venture to oppose it. Quadrupedes five times as big are easily vanquished; the hare, the sheep, and even the wild cat itself, though much stronger, is not a match for the martin: and although carnivorous animals are not fond of engaging each other, yet the wild cat and the martin seldom meet without a combat. Gesner tells us of one of this kind that he kept tame, which was extremely playful and pretty; it went among the houses of the neighbourhood, and always returned home when hungry: it was extremely fond of a dog that had been bred up with it, and used to play with it as cats are seen to play, lying on its back, and biting without anger or injury. That which was kept tame by Mr. Buffon was not quite so social: it was divested of its ferocity, but continued without attachment; and was still so wild as to be obliged to be held by a chain. Whenever a cat appeared, it prepared for war; and if any of the poultry came within its reach, it flew upon them with avidity. Though it was tied by the middle of the body, it frequently escaped: at first it returned after some hours, but without seeming pleased, and as if it only came to be fed;

the next time it continued abroad longer; and, at last, went away without ever returning. It was a female, and was, when it went off, a year and an half old; and Mr. Buffon supposes it to have gone in quest of the male. It eat every thing that was given it, except fallad or herbs; and it was remarkably fond of honey. It was remarked that it drank often, and often slept for two days together; and that, in like manner, it was often two or three days without sleeping. Before it went to sleep, it drew itself up into a round, hid its head, and covered it with its tail. When awake it was in continual agitation, and was obliged to be tied up, not less to prevent its attacking the poultry, than to hinder it from breaking whatever it came near, by the capricious wildness of its motions.

The yellow breasted martin is much more common in France than in England; and yet even there this variety is much scarcer than that with the white breast. The latter keeps nearer houses and villages to make its petty ravages among the sheep and the poultry; the other keeps in the woods, and leads in every respect a savage life, building its nests on the tops of trees, and living upon such animals as are entirely wild like itself. About night-fall it usually
quits

quits its solitude to seek its prey, hunts after squirrels, rats, and rabbits; destroys great numbers of birds and their young, takes the eggs from the nest, and often removes them to its own without breaking*. The instant the martin finds itself pursued by dogs, for which purpose there is a peculiar breed, that seem fit for this chace only, it immediately makes to its retreat, which is generally in the hollow of some tree, towards the top, and which it is impossible to come at without cutting it down. Their nest is generally the original tenement of the squirrel, which that little animal bestowed great pains in completing; but the martin having killed and dispossessed the little architect, takes possession of it for its own use, enlarges its dimensions, improves the softness of the bed, and in that retreat brings forth its young. Its litter is never above three or four at a time; they are brought forth with the eyes closed, as in all the rest of this kind, and very soon come to a state of perfection. The dam compensates for her own deficiency of milk, by bringing them eggs and live birds, accustoming them from the beginning to a life of carnage and rapine. When she leads them from the nest into the

* Brooke's Natural History.

woods, the birds at once distinguish their enemies and attend them, as we before observed of the fox, with all the marks of alarm and animosity. Wherever the martin conducts her young, a flock of small birds are seen threatening and insulting her, alarming every thicket, and often directing the hunter in his pursuit.

The martin is still more common in North-America than in any part of Europe. These animals are found in all the northern parts of the world, from Siberia to China and Canada. In every country they are hunted for their furs, which are very valuable, and chiefly so when taken in the beginning of winter. The most esteemed part of the martin's skin is that part of it which is browner than the rest, and stretches along the back-bone. Above twelve thousand of these skins are annually imported into England from Hudson's Bay, and above thirty thousand from Canada.

T H E S A B L E.

MOST of the classes of the weasel kind would have continued utterly unknown and disregarded were it not for their furs, which are finer, more glossy and soft, than those of any other quadrupede. Their dispositions are fierce and untameable; their scent generally offensive;

offensive; and their figure disproportioned and unpleasing. The knowledge of one or two of them would, therefore, have sufficed curiosity; and the rest would probably have been confounded together, under one common name, as things uselefs and uninteresting, had not their skins been coveted by the vain, and considered as capable of adding to human magnificence or beauty.

Of all these, however, the skin of the sable is the most coveted, and held in the highest esteem. It is of a brownish black, and the darker it is it becomes the more valuable. A single skin, though not above four inches broad, is often valued at ten or fifteen pounds*; the fur differing from others in this, that it has no grain; so that rub it which way you will, it is equally smooth and unresisting. Nevertheless, though this little animal's robe was so much coveted by the great, its history till of late was but very little known; and we are obliged to Mr. Jonelin for the first accurate description of its form and nature†. From him we learn that the sable resembles the martin in form and size, and the weasel in the number of its teeth; for it is to be observed, that whereas the martin has thirty-eight teeth, the weasel has but thirty-four; in this respect,

* Regnard. † Buffon, vol. xxvii. p. 113.

therefore,

therefore, the fable seems to make the shade between these two animals; being shaped like the one, and furnished with teeth like the other. It is also furnished with very large whiskers about the mouth; its feet are broad and, as in the rest of its kind, furnished with five claws on each foot. These are its constant marks; but its fur, for which it is so much valued, is not always the same. Some of this species are of a dark brown over all the body, except the ears and the throat, where the hair is rather yellow; others are more of a yellowish tincture, their ears and throat being also much paler. These in both are the colours they have in winter, and which they are seen to change in the beginning of the spring; the former becoming of a yellow brown, the latter of a pale yellow. In other respects they resemble their kind, in vivacity, agility, and inquietude; in sleeping by day and seeking their prey by night; in living upon smaller animals, and in the disagreeable odour that chiefly characterizes their race.

They generally inhabit along the banks of rivers, in shady places, and in the thickest woods. They leap with great ease from tree to tree, and are said to be afraid of the sun which tarnishes the lustre of their robes. They are chiefly hunted in winter for their
skins,

skins, during which part of the year they are only in season. They are mostly found in Siberia, and but very few in any other country of the world; and this scarcity it is which enhances their value. The hunting of the sable chiefly falls to the lot of the condemned criminals, who are sent from Russia into these wild and extensive forests that, for a great part of the year, are covered with snow; and in this instance, as in many others the luxuries and ornaments of the vain, are wrought out of the dangers and the miseries of the wretched. These are obliged to furnish a certain number of skins every year, and are punished if the proper quantity be not provided.

The sable is also killed by the Russian soldiers, who are sent into those parts to that end. They are taxed a certain number of skins yearly, like the former, and are obliged to shoot with only a single ball, to avoid spoiling the skin, or else with cross-bows and blunt arrows. As an encouragement to the hunters, they are allowed to share among themselves the surplus of those skins which they thus procure; and this, in the process of six or seven years, amounts to a very considerable sum. A colonel, during his seven years stay, gains about four thousand crowns for his share, and the common men six or seven hundred each for theirs.

THE ICHNEUMON.

THE Ichneumon, which some have injudiciously denominated the Cat of Pharaoh, is one of the boldest and most useful animals of all the weasel kind. In the kingdom of Egypt, where it is chiefly bred, it is used for the same purposes that cats are in Europe, and is even more serviceable, as being more expert in catching mice than they. This animal is usually of the size of the martin, and greatly resembles it in appearance, except that the hair, which is of a grizzly black, is much rougher and less downy. The tail also is not so bushy at the end; and each hair in particular has three or four colours, which are seen in different dispositions of its body. Under its rougher hairs, there is a softer fur of brownish colour, the rough hair being about two inches long, but that of the muzzle extremely short, as likewise that on the legs and paws. However, being long since brought into a domestic state, there are many varieties in this animal; some being much larger than the martin, others much less; some being of a lighter mixture of colours, and some being streaked in the manner of a cat.

The Ichneumon, with all the strength of a cat, has more instinct and agility; a more
universal

universal appetite for carnage, and a greater variety of powers to procure it*. Rats, mice, birds, serpents, lizards and insects, are all equally pursued; it attacks every living thing which it is able to overcome, and indiscriminately preys on flesh of all kinds. Its courage is equal to the vehemence of its appetite. It fears neither the force of the dog nor the insidious malice of the cat; neither the claws of the vulture nor the poison of the viper. It makes war upon all kinds of serpents with great avidity, seizes and kills them how venomous soever they be; and we are told that when it begins to perceive the effects of their rage, it has recourse to a certain root, which the Indians call after its name, and assert to be an antidote for the bite of the asp or the viper.

But what this animal is particularly serviceable to the Egyptians for is, that it discovers and destroys the eggs of the crocodile. It also kills the young ones that have not as yet been able to reach the water; and, as fable usually goes hand in hand with truth, it is said that the ichneumon sometimes enters the mouth of the crocodile, when it is found sleeping on the shore, boldly attacks the enemy in the inside, and at length,

* The rest of this description is extracted from Mr. Buffon, except where marked with inverted commas.

when it has effectually destroyed it, it eats its way out again.

The ichneumon when wild generally resides along the banks of rivers; and in times of inundation makes to the higher ground, often approaching inhabited places in quest of prey. It goes forward silently and cautiously, changing its manner of moving according to its necessities. Sometimes it carries the head high, shortens its body, and raises itself upon its legs; sometimes it lengthens itself and seems to creep along the ground; it is often observed to sit upon its hind legs, like a dog when taught to beg; but more commonly it is seen to dart like an arrow upon its prey, and seize it with inevitable certainty. Its eyes are sprightly and full of fire, its physiognomy sensible, its body nimble, its tail long, and its hair rough and various. Like all of its kind, it has glands that open behind and furnish an odorous substance. Its nose is too sharp and its mouth too small to permit its seizing things that are large; however, it makes up by its courage and activity its want of arms; it easily strangles a cat though stronger and larger than itself; and often fights with dogs, which, though ever so bold, learn to dread the ichneumon as a formidable enemy. It also takes the water like an otter, and, as we are told, will continue under it much longer.

This

This animal grows fast and dies soon. It is found in great numbers in all the southern parts of Asia, from Egypt to Java; and it is also found in Africa, particularly at the Cape of Good Hope. It is domestic, as was said, in Egypt; but in our colder climates it is not easy to breed or maintain them, as they are not able to support the rigour of our winters. Nevertheless they take every precaution that instinct can dictate to keep themselves warm; they wrap themselves up into a ball, hiding the head between the legs, and in this manner continue to sleep all day long. “ Seba had one sent him from the island of Ceylon, which he permitted to run for some months about the house. It was heavy and slothful by day, and often could not be awaked even with a blow; but it made up for this indolence by its nocturnal activity, smelling about without either being wholly tame or wholly mischievous. It climbed up the walls and the trees with very great ease, and appeared extremely fond of spiders and worms, which it preferred probably from their resemblance to serpents, its most natural food. It was also particularly eager to scratch up holes in the ground; and, this added to its wildness and uncleanness, obliged our naturalist to smother it in spirits, in order to preserve

preserve, and add it to the rest of his collection."

This animal was one of those formerly worshipped by the Egyptians, who considered every thing that was serviceable to them as an emanation of the Deity, and worshipped such as the best representatives of God below. Indeed, if we consider the number of eggs which the crocodile lays in the sand at a time, which often amount to three or four hundred, we have reason to admire this little animal's usefulness as well as industry in destroying them, since otherwise the crocodile might be produced in sufficient numbers to over-run the whole earth.

THE STINKARDS.

THIS is a name which our sailors give to one or two animals of the weasel kind, which are chiefly found in America. All the weasel kind, as was already observed, have a very strong smell; some of them indeed approaching to a perfume, but the greatest number most insupportably foetid. But the smell of our weasels, and ermines, and polecats, is fragrance itself when compared to that of the *squash* and the *skink*, which have been called the Polecats of America. These two are found in different parts of America, both differing in colour and fur,
but



De Serre del.

J. E. Lodge sculp.

The Squash.

but both obviously of the weasel kind, as appears not only from their figure and odour, but also from their disposition. The *squash* is about the size of a polecat, its hair of a deep brown, but principally differing from all of this kind in having only four toes on the feet before, whereas all other weasels have five. The *skink*, which I take to be Catesby's Virginia polecat, resembles a polecat in shape and size, but particularly differs in the length of its hair and colour. The hair is above three inches and an half long, and that at the end of the tail above four inches. The colour is partly black and partly white, variously disposed over the body, very glossy, long, and beautiful. There seem to be two varieties more of this animal, which Mr. Buffon calls the Conepate and the Zorille. He supposes each to be a distinct species: but as they are both said to resemble the polecat in form, and both to be cloathed with long fur of a black and white colour, it seems needless to make a distinction. The cone pate resembles the skink in all things except in size, being smaller, and in the disposition of its colours, which are more exact, having five white stripes upon a black ground, running longitudinally from the head to the tail. The Zorille resembles the skink, but is rather smaller and more beautifully coloured,

ed, its streaks of black and white being more distinct, and the colours of its tail being black at its insertion and white at the extremity; whereas in the skink they are all of one grey colour.

But whatever differences there may be in the figure or colour of these little animals, they all agree in one common affection, that of being intolerably foetid and loathsome. I have already observed that all the weasel kind have glands furnishing an odorous matter, near the anus, the conduits of which generally have their aperture just at its opening. That substance which is stored up in these receptacles, is in some of this kind, such as in the martin, already mentioned, and also in the genet and the civet, to be described hereafter a most grateful perfume; but in the weasel, the ermine, the ferret, and the polecat, it is extremely foetid and offensive. These glands in the animals now under consideration are much larger, and furnish a matter sublimed to a degree of putrescence that is truly amazing. As to the perfumes of musk and civet, we know that a single grain will diffuse itself over a whole house, and continue for months to spread an agreeable odour, without diminution. However, the perfume of the musk or the civet is nothing, either for strength or duration,

tion, to the insupportable odour of these. It is usually voided with their excrement; and if but a single drop happens to touch any part of a man's garment, it is more than probable that he can never wear any part of it more.

In describing the effects produced by the excrement of these animals, we often hear of its raising this diabolical smell by its urine. However, of this I am apt to doubt; and it should seem to me, that, as all the weasel kind have their excrements so extremely foetid from the cause above-mentioned, we may consider these also as being foetid from the same causes. Besides, they are not furnished with glands to give their urine such a smell; and the analogy between them and the weasel kind being so strong in other respects, we may suppose they resemble each other in this. It has also been said that they take this method of ejecting their excrement to defend themselves against their pursuers; but it is much more probable that this ejection is the convulsive effect of terror, and that it serves as their defence without their own concurrence. Certain it is that they never smell thus horridly except when enraged or affrighted, for they are often kept tame about the houses of the planters of America without being very offensive.

The

The habitudes of all these animals are the same, living like all the rest of the weasel kind, as they prey upon smaller animals and birds eggs. The squash, for instance, burrows like the polecat in the clefts of rocks, where it brings forth its young. It often steals into farm-yards, and kills the poultry, eating only their brains. Nor is it safe to pursue or offend it, for then it calls up all its scents, which are its most powerful protection. At that time neither men nor dogs will offer to approach it; the scent is so strong that it reaches for half a mile round, and more near at hand is almost stifling. If the dogs continue to pursue, it does all in its power to escape, by getting up a tree, or by some such means; but if driven to an extremity, it then lets fly upon the hunters; and if it should happen that a drop of this foetid discharge falls in the eye, the person runs the risque of being blinded for ever.*

The dogs themselves instantly abate of their ardour when they find this extraordinary battery played off against them; they instantly turn tail, and leave the animal undisputed master of the field; and no exhortations can ever bring them to rally. "In the year 1749," says Kalm, "one of these animals came near the farm where I lived. It

* Voyage de Kalm, as quoted by Buffon, vol xxvii. p. 93.

was in winter time, and during the night; and the dogs that were upon the watch, pursued it for some time, until it discharged against them. Although I was in my bed a good way off, I thought I should have been suffocated; and the cows and oxen themselves, by their lowings, shewed how much they were affected by the stench. About the end of the same year, another of these animals crept into our cellar, but did not exhale the smallest scent, because it was not disturbed. A foolish woman, however, who perceived it at night, by the shining of its eyes, killed it, and at that moment its stench began to spread. The whole cellar was filled with it to such a degree, that the woman kept her bed for several days after, and all the bread, meat, and other provisions, that were kept there, were so infected, that they were obliged to be thrown out of doors." Nevertheless, many of the planters, and the native Americans, keep this animal tame about their houses; and seldom perceive any disagreeable scents, except it is injured or frightened. They are also known to eat its flesh, which some assert to be tolerable food; however, they take care to deprive it of those glands which are so horridly offensive.

THE GENETT.

FROM the squash, which is the most offensive animal in nature, we come to the Genett, which is one of the most beautiful and pleasing. Instead of the horrid stench with which the former affects us, this has a most grateful odour; more faint than civet, but to some, for that reason, more agreeable. This animal is rather less than the martin; though there are genetts of different sizes; and I have seen one rather larger. It also differs somewhat in the form of its body. It is not easy, in words, to give an idea of the distinction. It resembles all those of the weasel kind, in its length, compared to its height; it resembles them in having a soft beautiful fur, in having its feet armed with claws that cannot be sheathed, and in its appetite for petty carnage. But then it differs from them in having the nose much smaller and longer, rather resembling that of a fox than a weasel. The tail also, instead of being bushy, tapers to a point, and is much longer; its ears are larger, and its paws smaller. As to its colours, and figure in general, the genett is spotted with black, upon a ground mixed with red and grey. It has two sorts of hair, the one shorter and softer,

softer, the other longer and stronger, but not above half an inch long on any part of its body, except the tail. Its spots are distinct and separate upon the sides, but unite towards the back, and form black stripes, which run longitudinally from the neck backwards. It has also along the back a kind of mane or longish hair, which forms a black streak from the head to the tail, which last is marked with rings, alternately black and white, its whole length.

The genett, like all the rest of the weasel kinds, has glands, that separate a kind of perfume, resembling civet, but which soon flies off. These glands open differently from those of other animals of this kind; for, as the latter have their apertures just at the opening of the anus, these have their aperture immediately under it; so that the male seems, for this reason, to the superficial observer, to be of two sexes.

It resembles the martin very much in its habits and disposition†; except, that it seems tamed much more easily. Bellonius assures us, that he has seen them in the houses at Constantinople as tame as cats; and that they were permitted to run every where about, without doing the least mischief. For this reason they have been called

† Buffon, vol. xix. p. 127.

the Cats of Constantinople; although they have little else in common with that animal, except their skill in spying out and destroying vermin. Naturalists pretend that it inhabits only the moister grounds, and chiefly resides along the banks of rivers, having never been found in mountains, nor dry places. The species is not much diffused; it is not to be found in any part of Europe, except Spain and Turkey; it requires a warm climate to subsist and multiply in; and yet it is not to be found in the warmer regions either of India or Africa. From such as have seen its uses at Constantinople, I learn, that it is one of the most beautiful, cleanly, and industrious animals in the world; that it keeps whatever house it is in, perfectly free from mice and rats, which cannot endure its smell. Add to this, its nature is mild and gentle, its colours various and glossy, its fur valuable; and upon the whole, it seems to be one of those animals that, with proper care, might be propagated amongst us, and might become one of the most serviceable of our domestics.

T H E C I V E T.

PROCEEDING from the smaller to the greater of this kind, we come, in the
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last place, to the Civet, which is much larger than any of the former; for as the martin is not above sixteen inches long, the civet is found to be above thirty. Mr. Buffon distinguishes this species into two kinds; one of which he calls the Civet, and the other the Zibet. The latter principally differs from the former in having the body longer and more slender, the nose smaller, the ears longer and broader; no mane or long hair running down the back in the latter; and the tail is longer and better marked with rings of different colours, from one end to the other. These are the differences which have induced this great naturalist to suppose them animals of distinct species; and to allot each a separate description. How far future experience may confirm this conjecture, time must discover; but certain it is, that if such small varieties make a separate class, there may be many other animals equally entitled to peculiar distinction that now are classed together. We shall, therefore, content ourselves, at present, with considering, as former naturalists have done, these two merely as varieties of the same animal, and only altered in the figure, by climate, food, or education.

The civet resembles animals of the weasel kind in the long slenderness of its body,
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the shortness of its legs, the odorous matter that exudes from the glands behind, the softness of its fur, the number of its claws, and their incapacity of being sheathed. It differs from them in being much larger than any hitherto described; in having the nose lengthened, so as to resemble that of the fox; the tail long, and tapering to a point; and its ears strait, like those of a cat. The colour of the civet varies: it is commonly ash, spotted with black; though it is whiter in the female, tending to yellow; and the spots are much larger, like those of a panther. The colour on the belly, and under the throat, is black; whereas the other parts of the body are black or streaked with grey. This animal varies in its colour, being sometimes streaked, as in our kind of cats called Tabbies. It has whiskers, like the rest of its kind; and its eye is black and beautiful.

The opening of the pouch or bag, which is the receptacle of the civet, differs from that of the rest of the weasel kind, not opening into but under the anus. Beside this opening, which is large, there is still another lower down; but for what purposes designed, is not known. The pouch itself is about two inches and an half broad, and two long; its opening makes a chink, from the top downwards, that is about two inches and

an half long; and it is covered on the edges, and within, with short hair: when the two sides are drawn asunder, the inward cavity may be seen, large enough to hold a small pullet's egg; all round there are small glands, opening and furnishing that strong perfume which is so well known, and is found, in this pouch, of the colour and consistence of pomatum. Those who make it their business to breed these animals for their perfume, usually take it from them twice or thrice a week, and sometimes oftener. The animal is kept in a long sort of a box, in which it cannot turn round. The person, therefore, opens this box behind, drags the animal backwards by the tail, keeps it in this position by a bar before, and, with a wooden spoon, takes the civet from the pouch, as carefully as he can; then lets the tail go, and shuts the box again. The perfume, thus procured, is put into a vessel, which he takes care to keep shut; and when a sufficient quantity is procured, it is sold to very great advantage.

The civet†, although a native of the warmest climates, is yet found to live in temperate, and even cold countries, provided it be defended carefully from the injuries of the

† Buffon, vol. xix.

air. Wherefore, it is not only bred among the Turks, the Indians, and Africans, but great numbers of these animals are also bred in Holland, where this scraping people make no small gain of its perfume. The perfume of Amsterdam is reckoned the purest of any; the people of other countries adulterating it with gums, and other matters, which diminish its value, but encrease its weight. The quantity which a single animal affords generally depends upon its health and nourishments. It gives more in proportion as it is more delicately and abundantly fed. Raw flesh, hashed small, eggs, rice, birds, young fowls, and particularly fish, are the kinds of food the civet most delights in. These are to be changed and altered, to suit and entice its appetite, and continue its health. It gets but very little water; and although it drinks but rarely, yet it makes urine very frequently; and, upon such occasions, we cannot, as in other animals, distinguish the male from the female.

The perfume of the civet is so strong that it communicates itself to all parts of the animal's body; the fur is impregnated thereby, and the skin penetrated to such a degree that it continues to preserve the odour for a long time after it is stript off. If a person be shut up with one of them in a close room,
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he cannot support the perfume, which is so copiously diffused. When the animal is irritated, as in all the weasel kind, its scent is much more violent than ordinary; and if it be tormented so as to make it sweat, this also is a strong perfume, and serves to adulterate or encrease what is otherwise obtained from it. In general, it is sold in Holland, for about fifty shillings an ounce; though, like all other commodities, its value alters in proportion to the demand. Civet must be chosen new, of a good consistence, a whitish colour, and a strong, agreeable smell. There is still a very considerable traffic carried on from Busserrah, Calicut, and other places in India, where the animal that produces it is bred; from the Levant also, from Guinea, and especially from Brasil, in South America, although Mr. Buffon is of opinion that the animal is a native only of the Old Continent, and not to be found wild in the New. The best civet, however, is furnished, as was observed, by the Dutch, though not such quantities at present as some years past, when this perfume was more in fashion. Civet is a much more grateful perfume than musk, to which it has some resemblance; and was some years ago used for the same purposes in medicine. But,

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at present, it is quite discontinued in prescription; and persons of taste or elegance seem to proscribe it even from the toilet. Perfumes, like drefs, have their vicissitudes; musk was in peculiar repute, until displaced by the civet; both gave ground, upon discovering the manner of preparing ambergrease; and even this is now disused for the less powerful vegetable kinds of fragrance, spirit of lavender, or otter of roses.

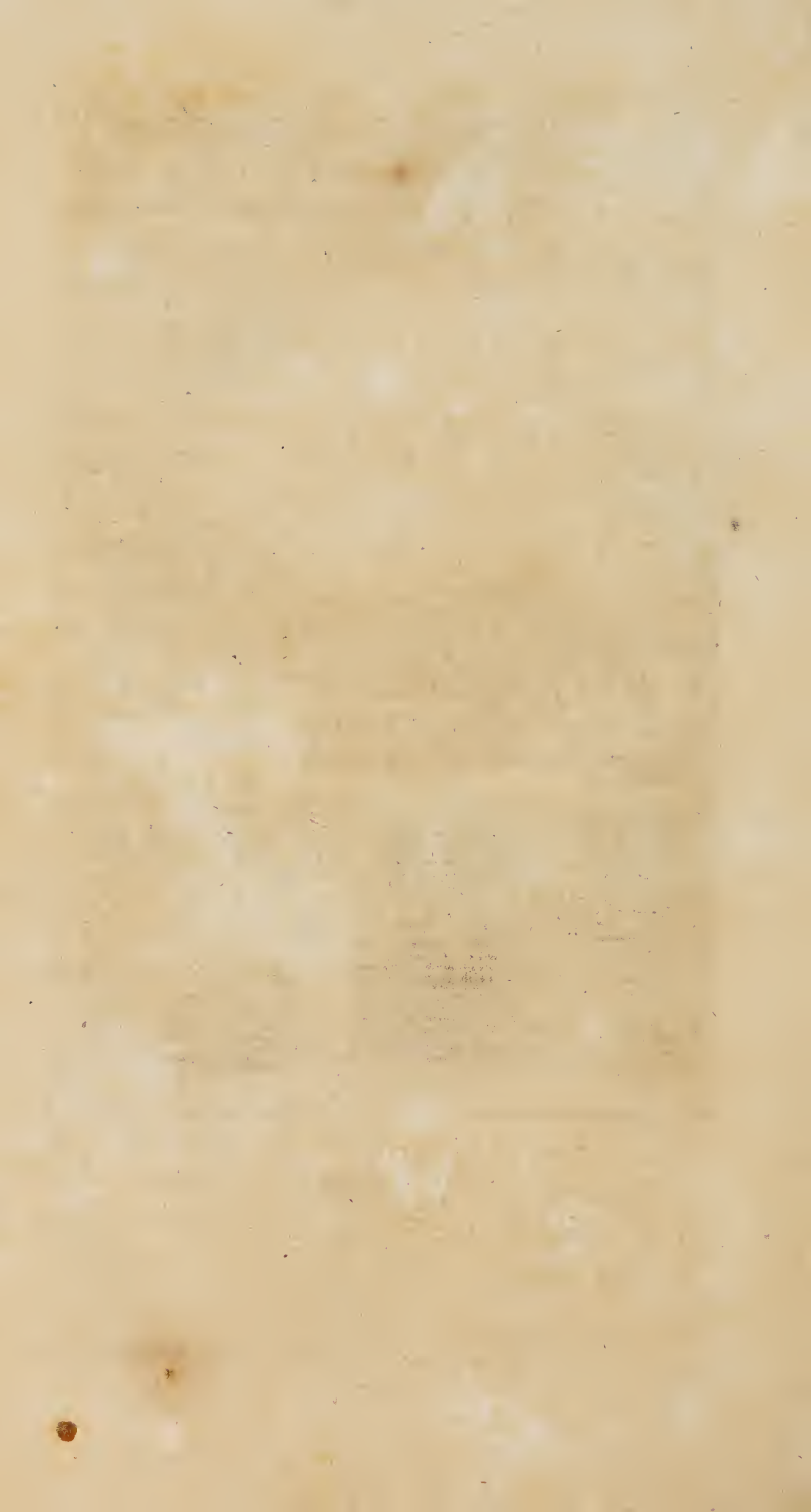
As to the rest, the civet is said to be a wild fierce animal; and, although sometimes tamed, is never thoroughly familiar. Its teeth are strong and cutting, although its claws be feeble and inflexible. It is light and active, and lives by prey, as the rest of its kind, pursuing birds, and other small animals that it is able to overcome. They are sometimes seen stealing into the yards and outhouses, to seize upon the poultry: their eyes shine in the night, and it is very probable that they see better in the dark than by day. When they fail of animal food, they are found to subsist upon roots and fruits, and very seldom drink; for which reason they are never found near great waters. They breed very fast in their native climates, where the heat seems to conduce to their propagation; but in our temperate latitudes, although they furnish their perfume in great quantities,



De Sevedel.

Jr. Lodge sculp.

The Civet.



quantities, yet they are not found to multiply.—A proof that their perfume has no analogy with their appetite for generation.

T H E G L U T T O N.

I WILL add but one animal more to this numerous class of the weasel kind; namely, the Glutton; which, for several reasons, seems to belong to this tribe, and this only. We have hitherto had no precise description of this quadrupede; some resembling it to a badger, some to a fox, and some to an hyæna. Linnæus places it among the weasels, from the similitude of its teeth; it should seem to me to resemble this animal still more, from the great length of its body, and the shortness of its legs, from the softness of its fur, its disagreeable scent, and its insatiable appetite for animal food. Mr. Klein, who saw one of them which was brought alive from Siberia, assures us, that it was about three feet long*, and about a foot and an half high. If we compare these dimensions with those of other animals, we shall find, that they approach more nearly to the class we are at present describing

* He says it was an ell, eight inches long; I have, therefore, given its length as supposing it to be a Flemish ell, which is twenty-seven inches.

than any other; and that the glutton may very justly be conceived under the form of a great overgrown weasel. Its nose, its ears, its teeth, and its long bushy tail, are entirely similar; and as to what is said of its being rather corpulent than slender, it is most probable that those who described it thus saw it after eating, at which time its belly we are assured is most monstrously distended: however, suspending all certainty upon this subject, I will take leave rather to follow Linnæus than Buffon in describing this animal; and leave future experience to judge between them.

The glutton, which is so called from its voracious appetite, is an animal found as well in the north of Europe and Siberia, as in the north parts of America, where it has the name of the Carcajou. Amidst the variety of descriptions which have been given of it, no very just idea can be formed of its figure; and, indeed, some naturalists, among whom was Ray, entirely doubted of its existence. From the best accounts, however, we have of it, the body is thick and long, the legs short; it is black along the back, and of a reddish brown on the sides; its fur is held in the highest estimation, for its softness and beautiful gloss; the tail is bushy, like that of the weasel, but rather shorter; and

and its legs and claws better fitted for climbing trees, than for running along the ground. Thus far it entirely resembles the weasel; and its manner of taking its prey is also by surprize, and not by pursuit.

Scarce any of the animals with short legs and long bodies, pursue their prey; but, knowing their own incapacity to overtake it by swiftness, either creep upon it in its retreats, or wait in ambush, and seize it with a bound. The glutton, from the make of its legs, and the length of its body, must be particularly slow; and, consequently, its only resource is in taking its prey by surprize. All the rest of the weasel kind, from the smallness of their size, are better fitted for a life of insidious rapine than this; they can pursue their prey into its retreats, they can lurk unseen among the branches of trees, and hide themselves with ease under the leaves: but the glutton is too large to follow small prey into their retreats; nor would such, even if obtained, be sufficient to sustain it. For these reasons; therefore, this animal seems naturally compelled to the life for which it has long been remarkable. Its only resource is to climb a tree, which it does with great ease, and there it waits with patience until some large animal passes underneath, upon which
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it darts down with unerring certainty, and destroys it.

It is chiefly in North America that this voracious creature is seen lurking among the thick branches of trees, in order to surprize the deer, with which the extensive forests of that part of the world abound. Endued with a degree of patience equal to its rapacity, the glutton singles out such trees as it observes marked by the teeth or the antlers of the deer; and is known to remain there watching for several days together. If it has fixed upon a wrong tree, and finds the deer have either left that part of the country, or cautiously shun the place, it reluctantly descends, pursues the beaver to its retreat, or even ventures into the water in pursuit of fishes. But if it happens that, by long attention, and keeping close, at last the elk or the rein-deer happens to pass that way, it at once darts down upon them, sticks its claws between their shoulders, and remains there unalterably firm. It is in vain that the large frightened animal encreases its speed, or threatens with its branching horns; the glutton having taken possession of its post, nothing can drive it off; its enormous prey drives rapidly along amongst the thickest woods, rubs itself against the largest trees, and

and tears down the branches with its expanded horns; but still its insatiable foe sticks behind, eating its neck, and digging its passage to the great blood-vessels that lie in that part. Travellers who wander through those deserts, often see pieces of the glutton's skin sticking to the trees, against which it was rubbed by the deer. But the animal's voracity is greater than its feelings, and it never seizes without bringing down its prey. When, therefore, the deer, wounded, and feeble with the loss of blood, falls, the glutton is seen to make up for its former abstinence, by its present voracity. As it is not possessed of a feast of this kind every day, it resolves to lay in a store to serve it for a good while to come. It is indeed amazing how much one of these animals can eat at a time! That which was seen by Mr. Klein, although without exercise or air, although taken from its native climate, and enjoying but an indifferent state of health, was yet seen to eat thirteen pounds of flesh every day, and yet remained unsatisfied. We may, therefore, easily conceive how much more it must devour at once, after a long fast, of a food of its own procuring, and in the climate most natural to its constitution. We are told, accordingly, that from being a lank thin animal, which it naturally is, it then gorges

gorges in such quantities, that its belly is distended, and its whole figure seems to alter. Thus voraciously it continues eating till incapable of any other animal function, it lies totally torpid by the animal it has killed; and in this situation continues for two or three days. In this loathsome and helpless state it finds its chief protection from its horrid smell, which few animals care to come near*; so that it continues eating and sleeping till its prey be devoured, bones and all; and then it mounts a tree, in quest of another adventure.

The glutton, like many others of the weasel kind, seems to prefer the most putrid flesh to that newly killed; and such is the voraciousness of this hateful creature, that, if its swiftness and strength were equal to its rapacity, it would soon thin the forest of every other living creature. But, fortunately, it is so slow that there is scarce a quadrupede that cannot escape it, except the beaver. This, therefore, it very frequently pursues upon land; but the beaver generally makes good its retreat by taking to the water, where the glutton has no chance to succeed. This pursuit only happens in summer; for in the winter all that remains is to attack the beaver's house, as at that time it never stirs

* Linnæi Syst. p. 67.

from home. This attack, however, seldom succeeds ; for the beaver has a covert way bored under the ice, and the glutton has only the trouble and disappointment of sacking an empty town.

A life of necessity generally produces a good fertile invention. The glutton, continually pressed by the call of appetite, and having neither swiftness nor activity to satisfy it, is obliged to make up by stratagem the defects of nature. It is often seen to examine the traps and the snares laid for other animals, in order to anticipate the fowlers. It is said to practise a thousand arts to procure its prey, to steal upon the retreats of the rein-deer, the flesh of which animal it loves in preference to all others ; to lie in wait for such animals as have been maimed by the hunters ; to pursue the isatis while it is hunting for itself ; and when that animal has run down its prey, to come in and seize upon the whole, and sometimes to devour even its poor provider ; when these pursuits fail, even to dig up the graves, and fall upon the bodies interred there, devouring them bones and all. For these reasons, the natives of the countries where the glutton inhabits, hold it in utter detestation, and usually term it the vulture of quadrupedes. And yet, it is extraordinary enough, that, being so very obnoxious

to man, it does not seem to fear. him* We are told by Gemelin of one of these coming up boldly and calmly where there were several persons at work, without testifying the smallest apprehension, or attempting to run until it had received several blows, that at last totally disabled it. In all probability it came among them seeking its prey; and, having been used to attack animals of inferior strength, it had no idea of a force superior to its own. The glutton, like all the rest of its kind, is a solitary animal; and is never seen in company except with its female, with which it couples in the midst of winter. The latter goes with young about four months, and brings forth two or three at a time. † They burrow in holes as the weasel; and the male and female are generally found together, both equally resolute in defence of their young. Upon this occasion the boldest dogs are afraid to approach them; they fight obstinately, and bite most cruelly. However, as they are unable to escape by flight, the hunters come in to the assistance of the dogs, and easily overpower them. Their flesh, it may readily be supposed, is not fit to be eaten; but the skins amply recompense the hunters for their toil and danger. The fur has the
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* Buffon.

† Linnæi System. p. 67.

most beautiful lustre that can be imagined, and is preferred before all others, except that of the Siberian fox, or the sable. Among other peculiarities of this animal, Linnæus informs us, that it is very difficult to be skinned ; but from what cause, whether its abominable stench, or the skin's tenacity to the flesh, he has not thought fit to inform us,

END OF THE THIRD VOLUME.





